

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

a25076
.A1454

United States
Department of
Agriculture

National
Agricultural
Library

and

United States
Environmental
Protection Agency

Office of Pesticide
Programs

Bibliographies
and Literature
of Agriculture
Number 39

reserve

Chemigation/Irrigation, January 1970- December 1984

Citations from Agricola



Chemigation/Irrigation, January 1970- December 1984

Citations from Agricola

Compiled and Edited by
Charles N. Bebee
National Agricultural Library

Bibliographies and Literature
of Agriculture No. 39

United States Department of Agriculture
National Agricultural Library
Beltsville, Maryland 20705

and

United States Environmental Protection Agency
Office of Pesticide Programs
Washington, D.C. 20460

August 1985

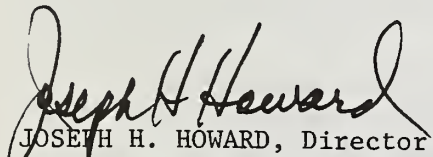
FOREWORD

This is a special subject volume included in a series of commodity-oriented environmental bibliographies resulting from a memorandum of understanding between the United States Department of Agriculture, National Agricultural Library (USDA-NAL), and the Environmental Protection Agency, Office of Pesticide Programs (EPA-OPP).

This close working relationship between the two agencies will produce a series of bibliographies which will be useful to EPA in the regulation of pesticides, as well as to any researcher in the field of plant or commodity protection. The broad scope of information contained in this series will benefit USDA, EPA, and the agricultural community as a whole.

The sources referenced in these bibliographies include the majority of the latest available information from publications involving commodity protection throughout the growing and processing stages for each agricultural commodity.

We welcome the opportunity to join this cooperative effort between USDA and EPA in support of the national agricultural community.



JOSEPH H. HOWARD, Director
National Agricultural Library



STEVEN SCHATZOW, Director
Office of Pesticide Programs



DOCUMENT DELIVERY SERVICES TO INDIVIDUALS

The National Agricultural Library (NAL) has a unique responsibility to attempt to supply copies of agricultural publications not found elsewhere. Filling requests for materials readily available from other sources would divert its resources and diminish its ability to serve as a national source for agricultural and agriculturally related publications. Therefore, NAL should be viewed as a library of last resort and individuals should submit requests first to local or state sources prior to sending to NAL. Possible sources are the land-grant university or other large research libraries within a state. If the needed publications are not available from these sources, the requests may be submitted to NAL with a statement indicating their non-availability.

Individuals in other countries should submit requests through major university, national or provincial institutions.

LOAN SERVICE — Materials in the collection are loaned only to other *libraries*. Requests for loans should be made through local public, academic or special libraries.

The following materials are **not** available for loan: serials (except USDA serials); rare, reference, and reserve books; microforms; and proceedings of conferences or symposiums. Photocopy or microform of non-circulating publications may be purchased as described below.

PHOTODUPLICATION SERVICE — Use "USDA Request for Photocopying" (form LF-607) which may be requested in advance from our Library. A *separate form* should be submitted for each article or item requested. Requests should be as complete as possible with a minimum of abbreviation. The source of the citation should be given. If the citation is from an NAL database (CAIN/AGRICOLA, *Bibliography of Agriculture*, or the NAL catalog) and the call number is given, that call number should be listed in the proper block on the request form. Willingness to pay charges should be indicated on the form. Indicate compliance with copyright law or include a statement that the article is for research purposes only. Requests cannot be processed without these statements.

Rates are:

Electrostatic copy, microfilm and microfiche —

\$ 5.00 for the first 10 pages or fraction copied from a single article or publication.

\$ 3.00 for each additional 10 pages or fraction.

Duplication of NAL -owned microfilm — \$ 10.00 per reel.

Duplication of NAL -owned microfiche— \$ 5.00 for the first fiche and \$.50 for each additional fiche.

Billing — Fees include postage and handling, and are subject to change. Invoices are issued quarterly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161. Requesters are encouraged to establish deposit accounts with NTIS.

DO NOT SEND PREPAYMENT.

SEND REQUESTS TO — USDA, National Agricultural Library, Lending Branch, ILL, Beltsville, Maryland 20705. Questions concerning these services may be made by correspondence to Head, Lending Branch or by telephoning (301) 344-3755.

NOTE —

- Once requests have been accepted and processing has begun, requests cannot be cancelled. The appropriate charge for filling requests will be applied.



DOCUMENT DELIVERY SERVICES AVAILABLE to Libraries and Other Information Centers and Commercial Organizations

The National Agricultural Library (NAL) accepts requests from libraries and other organizations in accordance with the national and international interlibrary loan code and guidelines. In its national role, NAL has a unique responsibility to attempt to supply copies of agricultural publications not found elsewhere. Filling requests for materials readily available from other sources would divert its resources and diminish its ability to serve as a national source for agricultural and agriculturally related publications. Therefore, NAL should be viewed as a library of last resort. Requestors should submit requests first to State/region/network sources prior to sending to NAL. Within the United States, possible sources are the land-grant university or other large research libraries within a state. Requesters in other countries should first try major university, national or provincial institutions. If the needed publications are not available from these sources, the requests may be submitted to NAL with a statement indicating their non-availability.

- Requests may be submitted on the American Library or the International Library interlibrary request form, by TWX (710-828-0506) or via the OCLC interlibrary loan subsystem. Our OCLC symbol is **AGL**, and we request that the symbol be entered twice. The complete name of the person authorizing the request is to appear on each form.
- The standard bibliographic source which lists the title as owned by NAL should be noted on each request. Requests for periodical articles should be verified. If verification is not possible, indicate the sources searched and give the source of the citation requested. Those requests which are verified or for which the citation source has been given receive a more thorough search. Unverified requests may be returned. If the citation is from an NAL database (CAIN/AGRICOLA, *Bibliography of Agriculture*, or the NAL catalog) and the call number is given, this call number should be included on the request.

LOAN SERVICE — Monographs published in the United States or abroad may be lent to U.S. libraries. Monographs published in the U.S. may be lent to libraries in other countries. The loan period is one month unless a shorter period is indicated on the due slip. The loan may be renewed for an additional month if there is no reserve request. The renewal request should be received prior to the due date. The borrowing library is responsible from the time of dispatch for any loss or damage incurred.

The following materials are **not** available for loan: serials (except for USDA serials), rare reference and reserve books, microforms, and proceedings of conferences or symposiums. Photocopy or microform of the non-circulating publications will be supplied automatically as described below if the requesting organization indicates that this is acceptable on the loan request form.

PHOTODUPLICATION SERVICE — A separate completed interlibrary form should be submitted for each article requested. Willingness to pay charges should be indicated on the form. Indicate compliance with copyright law or include a statement that the article is for research purposes only. Requests cannot be processed without these statements.

Rates are:

Electrostatic copy, microfilm and microfiche --

\$ 5.00 for the first 10 pages or fraction copied from a single article or publication.

\$ 3.00 for each additional 10 pages or fraction.

Duplication of NAL-owned microfilm — \$ 10.00 per reel.

Duplication of NAL-owned microfiche — \$ 5.00 for the first fiche and \$.50 for each additional fiche.

Billing — Fees include postage and handling, and are subject to change. Invoices are issued quarterly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161. Requesters are encouraged to establish deposit accounts with NTIS.

DO NOT SEND PREPAYMENT.

SEND REQUESTS TO — USDA, National Agricultural Library, Lending Branch, ILL, Beltsville, Maryland 20705. Questions concerning these services may be made by correspondence to Head, Lending Branch or by telephoning (301) 344-3755.

NOTE —

- Once requests have been accepted and processing has begun, requests cannot be cancelled. The appropriate charge for filling requests will be applied.

INTRODUCTION

The citations in this bibliography are selected from works on all aspects of chemigation/irrigation. All citations are derived from AGRICOLA (AGRICultural OnLine Access), the family of data bases compiled by the National Agricultural Library and its cooperators.

This is a special bibliography included in a series of commodity-oriented environmental data bases jointly sponsored by the National Agricultural Library, United States Department of Agriculture (USDA-NAL), and the Office of Pesticides Programs, Environmental Protection Agency (EPA-OPP). Additional volumes issued recently or planned for the immediate future concern protection of corn, soybeans, pome fruits, stone fruits, grain sorghum, rice, and peanuts.

Entries in the bibliography are subdivided into a series of subject headings used in the table of contents of the Bibliography of Agriculture and in the National Agricultural Library Catalog. Each citation appears under the subject heading assigned to the particular item. A complete author index is also included in the publication.

The Office of Pesticide Programs, EPA, has furnished technical assistance to the compiler through members of a commodity-oriented environmental data team which included:

Charles D. Reese
H. Irving Brigham
Bernard Schneider, PhD.
Richard Petrie

Any comments or questions may be forwarded to the compiler:

Charles N. Bebee
USDA, National Agricultural Library
Room 111
Beltsville, MD 20705
(301) 344-3704

CONTENTS

	<u>Item No.</u>
Administration	1
Legislation	2
Land Economics	3
Economics of Agricultural Production	4
Farm Organization and Management	5-7
Plant Production-General	8-11
Plant Production-Horticultural Crops	12-21
Plant Production-Field Crops	22-47
Plant Production-Range	48-49
Plant Breeding	50
Plant Nutrition	51-66
Plant Physiology and Biochemistry	67-68
Protection of Plants	69-72
Pests of Plants-Insects	73-84
Pests of Plants-Nematodes	85-86
Plant Diseases-Fungal	87-99
Miscellaneous Plant Disorders	100
Protection of Plant Products-General and Misc.	101-102
Weeds	102-135
Pesticides-General	136-153
Soil Science	154
Soil Chemistry and Physics	155-159
Soil Fertility-Fertilizers	160-264
Soil Cultivation	265-283
Soil Erosion and Reclamation	284-285
Aquaculture Related	286
Agricultural Engineering	287
Structures and Structural Equipment	288
Farm Equipment	289-295
Natural Resources	296
Water Resources and Management	297-308
Drainage and Irrigation	309-377
Food Processing	378
Pollution	379-388
Technology	389
1060	390
Author Index	p. 61-64
Corporate Author Index	p. 65

EPA BIBLIOGRAPHY

ADMINISTRATION

0001

Fertilizer use in Montana.

Heid Jr, Walter G; Larson, Donald K. Bozeman,
Mont Agr Exp Sta, Bulletin 628 (revised),. Apr
1974. AGE. Vol. 40 p: (NAL Call No.: 100 M76
(1)).

LEGISLATION

0002

Pollution laws and the Illinois farmer.
Uchtmann, D L. Illinois, University,
Cooperative Extension Service. Circ 111 Univ
Coop Ext Serv. Dec 1976. AGE. Vol. 1130, 20 p:
(NAL Call No.: 275.29 IL62C).

LAND ECONOMICS

0003

Surface application of sewage effluent and sludge (Water pollution, various methods including crop irrigation, forest application). Sopper, W.E. Madison, Wis., Soil Science Society of America. Agronomy. A series of monographs - American Society of Agronomy. American Society of Agronomy. 1979. 1979. (21). p. 633-663. ill. Includes ref. (NAL Call No.: 4 AM392).

ECONOMICS OF AGRIC. PRODUCTION

0004

Efficiency of modified urea fertilizers for tropical irrigated rice (Deep-point placement, slow-release, split application of prilled urea, yields, Asia).

Flinn, J.C. Mamaril, C.P.; Velasco, L.E.; Kaiser, K. The Hague : Nijhoff. Fertilizer research. 1984. v. 5 (2). p. 157-174. ill. Includes references. (NAL Call No.: S631.F422).

FARM ORGANIZATION AND MANAGEMENT

0005

An economic examination of an integrated pest management production system with a contrast between E-V and stochastic dominance analysis.
Musser, W.N. Tew, B.V. Epperson, J.E.
Gainesville, Fla., Southern Agricultural Economics Assoc. Extract: A multiple-crop integrated pest management production system incorporating agronomic and horticultural crops is examined within an E-V and a stochastic dominance framework. The data were from a five-year experiment in Tifton, Georgia. Irrigation and chemigation for the system are provided by a center-pivot irrigation system. The study concludes that, within the range of pest thresholds examined, less intensive pest control would be preferred by risk-averse producers and have lower pesticide usage. Southern journal of agricultural economics. July 1981. v. 13 (1). p. 119-124. 25 ref. (NAL Call No.: HD101.S6).

grower returns \$62 per acre over those realized under a constant (no soil information) application rate. North Central journal of agricultural economics. July 1983. v. 5 (2). p. 77-82. Includes 16 references. (NAL Call No.: HD1773.A3N6).

0006

Farmer participation in the Hall County ACP (Agricultural Conservation Program) special water quality project, Nebraska, 1980.
Hoover, H. Oscar, R. Washington, D.C. : The Service. Extract: A sample of 103 farm operators in the Hall County Agricultural Conservation Program (ACP) Special Water Quality Project area in Nebraska was interviewed to determine perceptions of water quality problems and awareness of the ACP Special Water Quality Project. Two-thirds of the farm operators indicated that high nitrate concentrations in the groundwater was a problem. While three operators in the four indicated a need to reduce the leaching of nitrates, only half of the sample agreed that irrigation contributed to the problem. Over 70 percent of the operators used nitrate management practices and 81 percent followed recommended nitrogen fertilizer application rates. ERS staff report - United States Dept. of Agriculture, Economic Research Service. Mar 1982. Available from NTIS, order no. PB83-151381. Mar 1982. (AGES820319). 24 p. (NAL Call No.: 916762(AGE)).

0007

Response functions and the value of soil test information: the case of sugar beets.
Adams, R.M. Farris, P.J.; Menkhous, D.J. Fargo : North Dakota State University. Extract: An important decision facing agricultural producers is determining fertilization rates. The producer's decision typically reflects information on plant nutrient response and input and output prices. An additional source of information is a soil test. The purpose of this analysis is to assess the value of response and soil test information using data on sugar beet nitrogen (N) fertilization. Value is measured by changes in producers gross returns of crops alternative decision rules portraying varying levels of soil and response information. Soil test information increased

PLANT PRODUCTION – GENERAL

0008

Increasing the productivity of alfalfa pastures by irrigation and application of primary and trace fertilizers.

Andreev, N G; Kobozev, I V. Sov Agric Sci. 1976 (transl. 1977). Translated from Vsesoiuznaia Akademiia Sel'skhoziasstvennykh Nauk Doklady 11: 9-11. (20 Ak1). Vol. 11: pp. 9-12. (NAL Call No.: S1.S68).

0009

Irrigation system effects on applied fertilizer nitrogen movement in soil (and effect on maize yields).

Onken, A.B. Wendt, C.W. Madison, Wis. Soil Science Society of America journal Soil Science Society of America. Mar/Apr 1979. v. 43 (2). p. 367-372. ill. 17 ref. (NAL Call No.: 56.9 S03).

0010

The relation between irradiance and grain yield of irrigated rice in the Tropics, as influenced by cultivar, nitrogen fertilizer application and month of planting.

Evans, L.T. De Datta, S.K. Amsterdam, Elsevier. Field crops research. Apr 1979. v. 2 (1). p. 1-17. ill. 7 ref. (NAL Call No.: SB183.F5).

0011

Results of citrus fertigation studies (Fertilizer materials through the irrigation systems, Florida).

Koo, R.C.J. s.l., The Society. Proceedings of the ... annual meeting of the Florida State Horticultural Society. 1980 (pub 1981). v. 93. p. 33-36. 8 ref. (NAL Call No.: 81 F66).

PLANT PRODUCTION - HORTICULTURAL CROPS

0012

Celery response to type, amount, and method of N (nitrogen)-fertilizer application under drip irrigation (California).

Feigin, A.AGJOA. Letey, J.; Jarrell, W.M.
Madison : American Society of Agronomy.
Agronomy journal. Nov/Dec 1982. v. 74 (6). p.
971-977. ill. 16 ref. (NAL Call No.: 4 AM34P).

0013

Effect of trickle irrigation, nitrogen rate, and method of nitrogen application on field-grown Japanese holly (*Ilex crenata*).

Eakes, D.J. Gilliam, C.H.; Ponder, H.G. Auburn, Ala. : The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Summer 1984. v. 31 (2). p. 17. ill. (NAL Call No.: 100 AL1H).

0014

Evaluating weed control and crop tolerance of soil- and foliar-active herbicides applied in the fall and spring to furrow-irrigated potatoes (Oregon).

Stranger, C.E.OASPA. Corvallis : The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1983. June 1983. (683). p. 77-84. (NAL Call No.: 100 OR3M).

0015

Fertilizer application and irrigation management of broccoli production and fertilizer use efficiency (*Brassica oleracea*, California).

Letey, J.AGJOA. Jarrell, W.M.; Valoras, N.; Beverly, R. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 502-507. ill. Includes references. (NAL Call No.: 4 AM34P).

0016

Localized fertigation of no-tillage intensive young olive fields (Spain).

Martin-Aranda, J. Nunez, D.; Moreno, F.; Arrue, J.L.; Roca, M. Osijek (Yugoslavia) : (The Organization?), 1982. Proceedings of the 9th Conference of the International Soil Tillage Research Organization, ISTRD. p. 357-362. Includes references. (NAL Call No.: S604.I52 1982).

0017

Nitrogen leaching in bermudagrass (*Cynodon X Magenisii*) turf: Daily fertigation vs. tri-weekly conventional fertilization.

Snyder, G.H. Burt, E.O.; Davidson, J.M. Madison, Wis., American Society of Agronomy. c1980. Proceedings of the third International Turfgrass Research Conference / James B. Beard, editor. Munich). p. 185-193. ill. Bibliography p. 193. (NAL Call No.: SB433.I57 1977).

0018

Nitrogen utilization efficiency by drip irrigated celery receiving preplant or water applied N fertilizer (*Apium graveolens*, residual soil nitrogen, *Hordeum vulgare*, California).

Feigin, A.AGJOA. Letey, J.; Jarrell, W.M. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1982. v. 74 (6). p. 978-983. ill. 12 ref. (NAL Call No.: 4 AM34P).

0019

Response of chickpea and fieldpeas to irrigation and fertilizer application (*Cicer arietinum*, *Pisum sativum*, India).

Panwar, K.S. Singh, J.P. New Delhi : Indian Society of Agronomy, 1981. Proceedings of the National Symposium on Crop Management to Meet the New Challenges held at Haryana Agricultural Univ., 14-16 Mar 1981 / ed. R. Prasad ... (et al.). p. 297-302. Includes references. (NAL Call No.: S602.5.N38 1981).

0020

Response of mustard to varying irrigation levels, spacing and fertilizer application. *Brassica*.

Singh, U B; Tomar, S P. Indian J Agron. Dec 1971. Vol. 16 (4): pp. 464-467. (NAL Call No.: 22 IN235).

0021

Yield of gram varieties as affected by sowing dates, fertilizer application and irrigation (*Cicer arietinum*, India).

Dumbre, A.D.JMAUD. Deshmukh, R.B. Pune : D.R. Bapat. Journal of Maharashtra agricultural universities. Sept 1983. v. 8 (3). p. 300. Includes references. (NAL Call No.: S471.I3J6).

PLANT PRODUCTION - FIELD CROPS

0022

Corn yield as influenced by in-season application of nitrogen with limited irrigation (Zea mays).

Anderson, C.K. Stone, L.R.; Murphy, L.S. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1982. v. 74 (2). p. 396-401. Includes 18 ref. (NAL Call No.: 4 AM34P).

0023

Drip ratoon practices and problems (Sugarcane, Hawaii, fertilizer applied through irrigation system).

Smith, R. Aiea, Hawaii, The Technologists. Reports...Annual conference - Hawaiian Sugar Technologists. 1981. 1981. (39th). p. 103-104. (NAL Call No.: 65.9 H317).

0024

Effect of fertilization and CCC (chlor-choline-chloride) application on winter wheat grown under irrigation (Growth inhibition to control lodging, Triticum).

Malesevic, M. Jevtic, S. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 187-189. (NAL Call No.: S612.2.W3).

0025

Effect of land levelling (including application of fertilizers/manures) and irrigation on wheat yield.

Khattak, J.K. Larsen, K.E.; Rashid, A.; Khattak, R.A.; Khan, S.U. Tokyo, Farm Machinery Industrial Research Corp. AMA, agricultural mechanization in Asia. Winter 1981. v. 12 (1). p. 11-14, 18. ill. 11 ref. (NAL Call No.: S760.A75A35).

0026

Effect of moisture regimes and level of fertilizer application on yield and water requirement of jute (Corchorus olitorius L. and Corchorus capsularis L.) (Irrigation, jute varieties, India).

Patel, C.S. Mandal, A.K. Cambridge : Cambridge University Press. The Journal of agricultural science. Oct 1983. v. 101 (pt.2). p. 311-316. Includes references. (NAL Call No.: 10 J822).

0027

Effect of organic matter and gypsum application on the grain yield of wheat irrigated with brackish water (Hissar area).

Singh, H.IJAGA. Sharma, H.C. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 454-456. (NAL Call No.: 22 IN235).

0028

Efficiency of water use and applied nitrogen in barley grown with stored soil moisture, supplemental irrigation and nitrogen application (Hordeum vulgare, India).

Cheema, S.S. Walia, A.S.; Kundra, H. New Delhi, Indian Council of Agricultural Research. The Indian journal of agricultural sciences. June 1982. v. 52 (6). p. 378-383. 13 ref. (NAL Call No.: 22 AG83I).

0029

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. IV. Urea and ammonium sulphase as nitrogen fertilizers (Wheat, Triticum).

Haggag, M. Salam, A.; Amer, S.; El-Kiesh, R.; Abed, A.H. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 325-328. 14 ref. (NAL Call No.: S612.2.W3).

0030

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. V. Effectiveness of banding and broadcasting of fertilizer phosphorus (Triticum).

Amer, S. Salam, A.; Haggag, M.; Khattab, F.; Gallab, R. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 329-331. 6 ref. (NAL Call No.: S612.2.W3).

0032

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. II. Effect on yield of different rates of N and P (nitrogen and phosphorus) applied separately or combined.

Amer, S. Haggag, M.; Salam, A.; El-Bakori, E. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981).

Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 317-319. 8 ref. (NAL Call No.: S612.2.W3).

0031

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. III. Yield response to one dose vs. split application of fertilizer nitrogen (Triticum, wheat).

Haggag, M. Salam, A.; Amer, S.; El-Shalwi, M.; Ahmed, E. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 321-324. 12 ref. (NAL Call No.: S612.2.W3).

0033

A method of economic analysis applied to nitrogen fertilizer rate experiments on irrigated corn by J.L. Paschal and B.L. French. Paschal, J. L. (James L.). Washington, D.C. U.S. Dept. of Agriculture 1956. 73 p. : ill. -. Bibliography: p. 62-63. (NAL Call No.: Fiche S-69 no.1141).

0034

Relative performance of some promising varieties of barley at different rates of N (nitrogen) application under irrigated conditions.

Mishra, B.N. Singh, K.N. New Delhi, Indian Society of Agronomy. Indian journal of agronomy. Sept 1980. v. 25 (3). p. 419-422. Includes 7 ref. (NAL Call No.: 22 IN235).

0035

Response of chickpea and fieldpeas to irrigation and fertilizer application (Cicer arietinum, Pisum sativum, India).

Panwar, K.S. Singh, J.P. New Delhi : Indian Society of Agronomy, 1981. Proceedings of the National Symposium on Crop Management to Meet the New Challenges held at Haryana Agricultural Univ., 14-16 Mar 1981 / ed. R. Prasad ... (et al.). p. 297-302. Includes references. (NAL Call No.: S602.5.N38 1981).

0036

Response of cotton to potash application in combination with nitrogen under irrigated condition (India).

Helkiah, J. Muthuswamy, P.; Chandramohan, J.; Ramanathan, K.M.; Krishnamoorthy, K.K. Coimbatore, Tamil Nadu Agricultural University. The Madras agricultural journal. Feb 1981. v. 68 (2). p. 82-85. Includes 5 ref. (NAL Call No.: 22 M262).

0037

Response of wheat cultivars to irrigation and fertilizer applications (Bangladesh).

Rahman, S.M. Basak, B.C.; Habibullah, A.K.M.; Ahmed, M.; Biswas, M.R. Tokyo : Farm Machinery Industrial Research Corp. AMA, agricultural mechanization in Asia, Africa and Latin America. Autumn 1983. v. 14 (4). p. 55-60. Includes references. (NAL Call No.: S760.A75A35).

0038

Response of wheat to irrigation schedules in relation to rate and times of nitrogen application (Effects on yields, India).

Koshta, L.D. IUAGA. Raghu, J.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Sept 1981. v. 26 (3). p. 262-266. 7 ref. (NAL Call No.: 22 IN235).

0039

Responses of soybean to irrigation and phosphate application in Chambal Command (India).

Singh, U.B. JMAUD. Singh, U.R. Pune : D.R. Bapat. Journal of Maharashtra agricultural universities. May 1983. v. 8 (2). p. 175. Includes references. (NAL Call No.: S471.I3J6).

0040

Rice water weevil control with preplant incorporated applications of isofenphos in a pinpoint flood rice production system (a preliminary report) (Lissorhoptrus oryzophilus, insecticides).

Robinson, J.F. Smith, C.M.; Trahan, G.B. Crowley : The Station. Annual progress report - Louisiana, Rice Experiment Station. 1982. 1982. (74th). p. 261-263. (NAL Call No.: 100 L93 (3)).

(PLANT PRODUCTION - FIELD CROPS)

0041

Sprinkler-applied and side-dressed nitrogen for irrigated corn grown on sand (Zea mays, fertigation, Georgia).

Gascho, G..AGJOAT. Hook, J.E.; Mitchell, G.A. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1984. v. 76 (1). p. 77-81. ill. Includes references. (NAL Call No.: 4 AM34P).

(C (2). p. 448-449. 8 ref. (NAL Call No.: 56.9 S03).

0047

Yield and quality of groundnut as influenced by irrigation and phosphorus application.

Malik, B.S. New Delhi, The Society. Bulletin - Indian Society of Soil Science. Indian Society of Soil Science. 1979. 1979. (12). p. 414-416. ill. 16 ref. (NAL Call No.: S590.I58).

0042

Studies on agrotechniques for reducing irrigation requirement with better utilization of nutrients by irrigated wheat (Fertilizer application, grain and straw yields, India).

Sharma, R.P.IJAGA. Ray, S.; Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 387-392. 4 ref. (NAL Call No.: 22 IN235).

0043

Studies on periodic dry-matter accumulation, nitrogen and phosphorus uptake by cauliflower (Var Snowball-16) as affected by soil moisture regimes and N and P application (Irrigation, nutrition, yields, New Delhi, India).

Sharma, R.P.IJAGA. Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Mar 1982. v. 27 (1). p. 52-60. Includes references. (NAL Call No.: 22 IN235).

0044

Studies on the effect of fertilizer doses and water volumes applied at sowing time on the yield of wheat grown under dryland conditions (India).

Sharma, R.P.IJAGA. Ray, S.B.; Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Sept 1981. v. 26 (3). p. 213-219. ill. 4 ref. (NAL Call No.: 22 IN235).

0045

Studies with ¹⁵N (nitrogen isotope) on fertilization of wheat as affected by source and time of application at two moisture levels (Irrigation, India).

Sinha, M.N.IJAGA. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 413-418. 7 ref. (NAL Call No.: 22 IN235).

0046

Sugarbeet response to incremental application of nitrogen with high frequency sprinkler irrigation.

Roberts, S. Weaver, W.H.; Richards, A.W. Madison, Wis., The Society. Journal - Soil Science Society of America. Mar/Apr 1981. v. 45

PLANT PRODUCTION - RANGE

0048

Economics of fertilizer application on an irrigated meadow in southwestern Montana.
Lacey, J.R. Maki, J.E.; Hertzog, P.J.; Bauder, J.W. Bozeman : The Station. Research report - Montana. Agricultural Experiment Station. 1983. 1983. (213). p. 16-19. (NAL Call No.: S544.3.M6M6).

0049

Vegetation changes in a moist grassland under altered water conditions (improved drainage and fertilizer applications).
Smeets, P.J.A.M. Werger, M.J.A.; Tevonderen, H.A.J. Barking, Essex, Eng., Applied Science Publishers. Biological conservation. Aug 1980. v. 18 (2). p. 123-142. maps. 24 ref. (NAL Call No.: S900.B5).

PLANT BREEDING

0050

Relative performance of some promising varieties of barley at different rates of N (nitrogen) application under irrigated conditions.

Mishra, B.N. Singh, K.N. New Delhi, Indian Society of Agronomy. Indian journal of agronomy. Sept 1980. v. 25 (3). p. 419-422. Includes 7 ref. (NAL Call No.: 22 IN235).

PLANT NUTRITION

0051

Applying nutrients and other chemicals to trickle-irrigated crops (Plant requirements, irrigation systems).
Rolston, D.E. Rauschkolb, R.S. Berkeley, Calif., The Service. Bulletin. California. University, Berkeley. Cooperative Extension Service. Aug 1979. Aug 1979. (1893). 14 p. ill. 17 ref. (NAL Call No.: S39.A2C3).

0052

Celery response to type, amount, and method of N (nitrogen)-fertilizer application under drip irrigation (California).
Feigin, A.AGJOA. Letey, J.; Jarrell, W.M. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1982. v. 74 (6). p. 971-977. ill. 16 ref. (NAL Call No.: 4 AM34P).

0053

Economics of fertilizer application on an irrigated meadow in southwestern Montana.
Lacey, J.R. Maki, J.E.; Hertzog, P.J.; Bauder, J.W. Bozeman : The Station. Research report - Montana. Agricultural Experiment Station. 1983. 1983. (213). p. 16-19. (NAL Call No.: S544.3.M6M6).

0054

Efficiency of modified urea fertilizers for tropical irrigated rice (Deep-point placement, slow-release, split application of prilled urea, yields, Asia).
Flinn, J.C. Mamaril, C.P.; Velasco, L.E.; Kaiser, K. The Hague : Nijhoff. Fertilizer research. 1984. v. 5 (2). p. 157-174. ill. Includes references. (NAL Call No.: S631.F422).

0055

Efficiency of nitrogen uptake by wheat as a function of fertilizers form, time and methods of application, and supplemental irrigation.
Shammas, A T; Kishli, A L; Abi-Antune, M; Abou-Khaled, A. Magon Publ Ser Sci. Dec 1973. Vol. 51, 49 p. Ref.: (NAL Call No.: S19.M3).

0056

Fertigation: a tomato study in New Jersey (Irrigation, fertilization).
Paterson, J. Atlanta, Ga., Potash & Phosphate Institute. Better crops with plant food. Summer 1980. v. 44. p. 3. (NAL Call No.: 6 B46).

0057

Fertigation supplements base fertilizer program (Irrigated crops, Georgia).
Segars, W.L. Atlanta, Potash & Phosphate Institute. Better crops with plant food. Summer 1982. v. 66. p. 6-7, 9. (NAL Call No.: 6 B46).

0058

Fertilizer application and irrigation management of broccoli production and fertilizer use efficiency (Brassica oleracea, California).
Letey, J.AGJOA. Jarrell, W.M.; Valoras, N.; Beverly, R. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 502-507. ill. Includes references. (NAL Call No.: 4 AM34P).

0059

Influence of irrigation and application of nitrogenous fertilizers on the composition and certain properties of wheat proteins.
Shestakova, N A. Appl Biochem Microbiol. Sept/Oct 1974 (transl 1976). Translated from Prikladnaia Biokhimiia Mikrobiologiya 10 (5): 648-655. (385 P93). Vol. 10 (5): pp. 554-561. Ref. (NAL Call No.: QH345.A1P73).

0060

Irrigation as an integral management tool in pecans (for applying nutrients and pesticides).
Aitken, J.B. Camp, C.R. Starkville : The Association. Proceedings ... annual convention - Southeastern Pecan Growers Association. 1983. 1983. (76th). p. 59-65. ill. Includes references. (NAL Call No.: 94.69 G29).

0061

Nitrogen application timing and source for drip irrigated tomatoes (Lycopersicon esculentum).
Locascio, S.J. Myers, J.M.; Fiskell, J.G.A. Slough, UK : Commonwealth Agricultural Bureaux, c1982. Plant nutrition 1982 : proceedings of the ninth International Plant Nutrition Colloquium, Warwick University, England, August 22-27, 1982 / edited by A. Scaife. p. 323-328. Includes references. (NAL Call No.: QK867.C65 1982).

0062

Nitrogen balance in a citrus orchard (Shamouti orange, fertilizer and irrigation applications, Israel).
Dasberg, S. Erner, Y.; Bielorai, H. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1984. v. 13 (3). p. 353-356. Includes references. (NAL Call No.: QH540.J6).

(PLANT NUTRITION)

0063

**Nitrogen "fertigation" of Shamouti oranges
(Nitrogen fertilizer supplied in the irrigation
water).**

Dasberg, S.PLS0A2. Bielorai, H.; Erner, J. The
Hague : Martinus Nijhoff. Plant and soil. 1983.
v. 75 (1). p. 41-49. Includes references. (NAL
Call No.: 450 P696).

0064

**Nitrogen utilization efficiency by drip
irrigated celery receiving preplant or water
applied N fertilizer (Apium graveolens,
residual soil nitrogen, Hordeum vulgare,
California).**

Feigin, A.AGJ0A. Letey, J.; Jarrell, W.M.
Madison : American Society of Agronomy.
Agronomy journal. Nov/Dec 1982. v. 74 (6). p.
978-983. ill. 12 ref. (NAL Call No.: 4 AM34P).

0065

**Response of barley to nitrogen application
under graded levels of irrigation.**

Hooda, R.S. Kalra, G.S. Karnal, Agricultural
Research Communication Centre. Indian journal
of agricultural research. Sept 1979. v. 13 (3).
p. 143-146. ill. 4 ref. (NAL Call No.: S3.I5).

0066

**Sprinkler-applied and side-dressed nitrogen for
irrigated corn grown on sand (Zea mays,
fertigation, Georgia).**

Gascho, G..AGJ0AT. Hook, J.E.; Mitchell, G.A.
Madison : American Society of Agronomy.
Agronomy journal. Jan/Feb 1984. v. 76 (1). p.
77-81. ill. Includes references. (NAL Call No.:
4 AM34P).

PLANT PHYSIOLOGY AND BIOCHEMISTRY

0067

Studies on periodic dry-matter accumulation, nitrogen and phosphorus uptake by cauliflower (Var Snowball-16) as affected by soil moisture regimes and N and P application (Irrigation, nutrition, yields, New Delhi, India).

Sharma, R.P.IJAGA. Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Mar 1982. v. 27 (1). p. 52-60.

Includes references. (NAL Call No.: 22 IN235).

0068

Wheat grain quality as affected by irrigations number and rates and splitting of nitrogen fertilizer (Spacing of fertilizer application, Egypt).

Eweida, M.H.T. Hagra, A.M.; El-Monoufi, M.M.A. Moshtohor, Zagazig Univ., Faculty of Agricultural Science. Annals of agricultural science (Moshtohor). 1980. v. 14. p. 47-59.

Includes 2 p. ref. (NAL Call No.: S341.A5).

PROTECTION OF PLANTS

0069

Control of cucumber foliar diseases, fruit rot, and nematodes by chemicals (chlorothalonil, mancozeb, phenamiphos) applied through overhead sprinkler irrigation.

Sumner, D.R. Phatak, S.C.; Smittle, D.; Johnson, A.W.; Glaze, N.C. St. Paul, Minn., American Phytopathological Society. Plant disease. May 1981. v. 65 (5). p. 401-404. 16 ref. (NAL Call No.: 1.9 P69P).

0070

Developing a center pivot irrigation simulator for pesticide applications.

Pickle, F.U. Chesness, J.L. St. Joseph, Mich., American Society of Agricultural Engineers. A Compilation of sprinkler irrigation papers. 1980. 1980. (79-2084). 19 p. ill. 21 ref. (NAL Call No.: S619.S66C6).

0071

Factors to be considered in the application of pesticides via drip irrigation.

Saltzman, S. Gerstl, Z.; Yaron, B. Paris : Institut national de la recherche agronomique, (1980?). Les Phenomenes de transport de l'eau et des solutes et l'irrigation : colloque franco-israelien, Avignon, 12-13-14 mai 1980. p. 71-82. ill. 5 ref. (NAL Call No.: S618.P5 1980).

0072

Root zone modification: fundamentals and alternatives (To till, fertilize, lime, irrigate, drain, and apply pesticides).

Taylor, H.M. Arkin, G.F. St. Joseph, Mich., American Society of Agricultural Engineers. Modifying the root environment to reduce crop stress. 1981. 1981. p. 3-17. ill. Includes 36 ref. (NAL Call No.: S596.7.M63).

PESTS OF PLANTS - INSECTS

0073

Chemigation, or application of insecticide through overhead sprinkler irrigation systems, to manage insect pests infesting vegetable and agronomic crops (Georgia).

Chalfant, R.B. Young, J.R. College Park, Md., Entomological Society of America. Journal of economic entomology. Apr 1982. v. 75 (2). p. 237-241. ill. 6 ref. (NAL Call No.: 421 J822).

0074

Control of rice stem borer, *Tryporyza incertulas* Wlk. with application of insecticides in irrigation water.

Ramakrishnan, C; Velayutham, B; Narayanan, K; Sithanatham, S. Madras Agr J. Mar 1972. Vol. 59 (3): pp. 169-174. Ref. (NAL Call No.: 22 M262).

0075

Control of sugarcane *Pyrilla* (*perpusilla*) using systemic insecticides through irrigation water and soil application.

Patil, A.S. Hapase, D.G.; Moholkar, P.R. Kanpur, The Association. Proceedings of the ... annual convention of the Sugar Technologists' Association of India. 1980. 1980. (44th). p. 53-60. 9 ref. (NAL Call No.: 65.9 SU33P).

0076

An economic examination of an integrated pest management production system with a contrast between E-V and stochastic dominance analysis.

Musser, W.N. Tew, B.V. Epperson, J.E. Gainesville, Fla., Southern Agricultural Economics Assoc. Extract: A multiple-crop integrated pest management production system incorporating agronomic and horticultural crops is examined within an E-V and a stochastic dominance framework. The data were from a five-year experiment in Tifton, Georgia. Irrigation and chemigation for the system are provided by a center-pivot irrigation system. The study concludes that, within the range of pest thresholds examined, less intensive pest control would be preferred by risk-averse producers and have lower pesticide usage. Southern journal of agricultural economics. July 1981. v. 13 (1). p. 119-124. 25 ref. (NAL Call No.: HD101.S6).

0077

Effect of BHC and aldrin on the termite *Microtermes obesi* damage in irrigated wheat crop, when insecticides were applied by different methods.

Verma, A N; Verma, N D; Tiwari, C B. Indian J Entomol. Sept 1974 (pub. July 1976). Vol. 36 (3): pp. 221-225. (NAL Call No.: 420 IN23).

0078

Evaluation of southwestern corn borer control through center-pivot chemigation (Irrigation systems, pest control, Texas High Plains).

Michels, G.J. Chedester, L.D. College Station : The Station. PR - Texas Agricultural Experiment Station. July 1983. July 1983. (4134). 6 p. ill. Includes references. (NAL Call No.: 100 T31P).

0079

Influence of planting date, preplanting weed control, irrigation, and conservation tillage practices on efficacy of planting time insecticide applications for control of lesser cornstalk borer (*Elasmopalpus lignosellus*) in field corn.

All, J.N. Gallaher, R.N. College Park, Entomological Society of America. Journal of economic entomology. Apr 15, 1979. v. 72 (2). p. 265-268. ill. 14 ref. (NAL Call No.: 421 J822).

0080

Influences of rainfall and sprinkler irrigation on the residual activity of insecticides applied to corn for control of adult western corn rootworm (*Coleoptera:Chrysomelidae*) (*Diabrotica virgifera virgifera*).

Mayo, Z.B. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 190-193. Includes references. (NAL Call No.: 421 J822).

0081

Insecticide application with sprinkler irrigation systems (Control of the fall armyworm, *Spodoptera frugiperda* and the corn earworm, *Heliothis zea*).

Young, J.R. Keisling, T.C.; Stansell, J.R. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Jan/Feb 1981. v. 24 (1). p. 120-123. ill. 12 ref. (NAL Call No.: 290.9 AM32T).

0082

Pest management using center pivots (Corn insect pest control, application of chemicals with irrigation).

Raun, E.S. St. Paul, Minn., Webb Co. Irrigation age. May/June 1979. v. 13 (8). p. 17-18. ill. (NAL Call No.: TC801.17).

(PESTS OF PLANTS - INSECTS)

0083

Residues of carbofuran applied as a systemic insecticide in irrigated wetland rice:

implications for insect control (*Hydrellia philippina*, *Chelo suppressalis*, *Nelaparvata lugens*, *Nephotettix virescens*).

Seiber, J.N. Heinrichs, E.A. Manila,
International Rice Research Institute. IRRI
research paper series International Rice
Research Institute. May 1978. May 1978. (17).
28 p. ill. 17

[illegible]

0084

Rice water weevil control with preplant incorporated applications of isofenphos in a pinpoint flood rice production system (a preliminary report) (*Lissorhoptrus oryzophilus*, insecticides).

Robinson, J.F. Smith, C.M.; Trahan, G.B.
Crowley : The Station. Annual progress report -
Louisiana, Rice Experiment Station. 1982. 1982.
(74th). p. 261-263. (NAL Call No.: 100 L93
(3)).

PESTS OF PLANTS - NEMATODES

0085

Application of pesticides via drip irrigation to control nematodes and foliar arthropods (Paratrichodorus, Belonolaimus).
Overman, A.J. Price, J.F. (S.I.) : The Society. Proceedings - Soil and Crop Science Society of Florida. 1983. v. 42. p. 92-96. Includes references. (NAL Call No.: 56.9 S032).

0086

Nematocide residues in pineapple culture following point source application (through drip irrigation systems, Hawaii, Rotylenchulus reniformis).
Hyllin, V. Hylin, J.W.; Apt, W. Oxford : Pergamon Press, c1983. Pesticide chemistry : human welfare and the environment : proceedings of the 5th International Congress of Pesticide Chemistry, Kyoto, Japan, 29 August-4 September 1982 / editors-in-chief, J. Miyamoto and P.C. Kearney. p. 213-216. ill. Includes references. (NAL Call No.: SB951.I562 1982 V.4).

PLANT DISEASES - FUNGAL

0087

Application of fungicides to peanuts through the irrigation system.

Backman, P.A. Crawford, M.A.; Rochester, E.W. Auburn, The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Summer 1981. v. 28 (2). p. 8. ill. (NAL Call No.: 100 AL1H).

0088

Control leaf diseases with your irrigation rig Peanuts, fungicides application.

Lee, T A Jr. Prog Farmer (Birmingham). May 1977. Vol. 92 (5): pp. N24-N25. (NAL Call No.: 6 T311).

0089

Control of brown rot (caused by *Phytophthora* spp.) of citrus fruit (oranges, grapefruit) by application of fungicides via sprinkler irrigation systems.

Oren, Y. Solel, Z. Bet Dagan, Agricultural Research Organization. *Phytoparasitica*. 1978. v. 6 (2). p. 65-70. ill. 9 ref. (NAL Call No.: SB599.P53).

0090

Control of cercospora leaf spot and rhizoctonia crown rot diseases of sugarbeet with fungicides applied by sprinkler irrigation.

Potter, H.S. Schneider, C.L. Fort Collins, Colo., The Society. *Journal of the American Society of Sugar Beet Technologists*. Apr 1981. v. 21 (1). p. 50-55. 8 ref. (NAL Call No.: 66.9 AM35J).

0091

Control of white mold of dry beans by fungicides applied via sprinkler irrigation (*Sclerotinia sclerotiorum*).

Forster, R.L. Samson, R.G. Geneva, N.Y. : Bean Improvement Cooperative. Annual report of the Bean Improvement Cooperative. 1984. v. 27. p. 106. (NAL Call No.: SB327.A1B5).

0092

Delayed applications of Topsin M fungicide via center-pivot sprinkler for white mold control in dry beans, 1982 (*Sclerotinia sclerotiorum*, *Phaseolus vulgaris*).

Forster, R.L. FNETD. (s.l.) : The Society. Fungicide and nematocide tests : results - American Phytopathological Society. 1983. v. 38. p. 90. (NAL Call No.: 464.9 AM31R).

0093

Evaluation of sprinkler application of fungicides for control of potato early blight in Colorado (*Alternaria solani*).

Franc, G.D. APOJA. Nnodu, E.C.; Harrison, M.D.; Sadler, A.J. Orono : Potato Association of America. *American potato journal*. Aug 1983. Aug 1983. v. 60 (8). p. 631-643. Includes references. (NAL Call No.: 75.8 P842).

0094

Lack of foliar protection from early blight *Alternaria solani* by aircraft-applied fungicides on sprinkler-irrigated potatoes.

Easton, G D; Nagle, M E; Bailey, D L. U.S., Agricultural Research Service, Crops Research Division. *Plant Dis Rep*. Nov 1975. Vol. 59 (11): pp. 910-914. Ref. (NAL Call No.: 1.9 P69P).

0095

Mobility and persistence of carbendazole (fungicides) applied to soil via drip irrigation (to control *Phoma tracheiphila*, in a lemon grove).

Solel, Z. Sandler, D. St. Paul, Minn., American Phytopathological Society. *Phytopathology*. Dec 1979. v. 69 (12). p. 1273-1277. ill. 22 ref. (NAL Call No.: 464.8 P56).

0096

Monilinia laxa life cycle on sweet cherries and its control by overhead sprinkler fungicide applications.

Ogawa, J M; Manji, B T; Schreader, W R. U.S., Agricultural Research Service, Crops Research Division. *Plant Dis Rep*. Nov 1975. Vol. 59 (11): pp. 876-880. (NAL Call No.: 1.9 P69P).

0097

Quality pumps the key to effective fungigation (Using irrigation rigs to apply fungicides).

Raleigh, Harvest. *The Peanut farmer*. May 1980. v. 16 (5). p. 28. (NAL Call No.: SB351.A1P3).

0098

Sprinkler application of benlate fungicide for white mold control in dry beans, 1979 (Beans (*Phaseolus vulgaris* 'Upland' and 'Small White'), white mold; *Sclerotinia sclerotiorum*).

Forster, R.L. (s.l.), The Society. Fungicide and nematocide tests; results - American Phytopathological Society. 1980. v. 35. p. 56. (NAL Call No.: 464.9 AM31R).

0099

What's next for fungigation? (Fungicide application through irrigation for peanuts).
Watson, S. Raleigh, Harvest Publishing Co. The Peanut farmer. Apr 1981. v. 17 (4). p. 16, 21.
(NAL Call No.: SB351.A1P3).

MISCELLANEOUS PLANT DISORDERS

0100

Fall-applied herbicides for annual weed control
in furrow-irrigated peppermint and spearmint
(Tolerance, Oregon).

Stranger, C.E.OASPA. Corvallis : The Station.
Special report - Agricultural Experiment
Station, Oregon State University. June 1983.
June 1983. (683). p. 26-29. (NAL Call No.: 100
OR3M).

PROTECTION OF PLANT PRODUCTS - GENERAL AND MISC.

0101

Application of Benlate fungicide through a center-pivot sprinkler for white mold control in dry beans, 1980 (Beans (dry) (*Phaseolus vulgaris* 'Viva' Pink), white mold; *Sclerotinia sclerotiorum*).

Forster, R.L. (s.l.), The Society. Fungicide and nematicide tests; results - American Phytopathological Society, 1981. v. 36. p. 51. (NAL Call No.: 464.9 AM31R).

0102

Inorganic constituents of sugarcane juice as influenced by irrigation and fertiliser application.

Srinivasan, T.R. Morachan, Y.B. New Delhi, Indian Sugar Mills Association. Indian sugar. Oct 1978. v. 28 (7). p. 443-439. ill. 12 ref. (NAL Call No.: 65.8 IN26).

WEEDS

0103

Application of herbicides through a center-pivot sprinkler system for weed control in potatoes.

Ogg, A G Jr. Spudman. Feb 1975. Vol. p. 6-7.: (NAL Call No.: 75.8 SP93).

0104

Application of herbicides through a microjet irrigation system.

Bredell, G S; Barnard, C J; Vincent, A P. Citrus Sub-Trop Fruit J. May 1975. Vol. 497: pp. 17-18. (NAL Call No.: 80 C495).

0105

Application of herbicides through sprinkler systems.

Ogg, A. Tampa. Citrus and vegetable magazine. May 1979. v. 42 (9). p. 22-23. (NAL Call No.: 80 C498).

0106

Applying herbicides postemergence through irrigation (Weed control).

Dowler, C.C. Madison, Wis. : American Society of Agronomy. Crops and soils magazine. June/July 1984. v. 36 (8). p. 14-16. ill. (NAL Call No.: 6 W55).

0107

Chemical weed control in corn : 1981.

Wrage, Leon J. Arnold, W. E. Document available from: South Dakota State University, Ag. Information Bulletin Room, Extension Building, Brookings, South Dakota 57007 1981. This publication contains registered EPA herbicides for corn. Herbicide suggestions, reduced tillage systems furrow and top plant, band vs. broadcast, and irrigated corn are the topics discussed. 8 p. (NAL Call No.: Document available from source.). (NAL Call No.: FS 525C).

0108

Chemical weed control in sorghum : 1981.

Wrage, Leon J. Arnold, W. E. Document available from: South Dakota State University, Ag. Information Buleting Room, Extension Building, Brookings, South Dakota 57007 1981. This publication discusses herbicide suggestions, band vs. broadcast application, reduced tillage systems, and sorghum irrigation. The herbicides included have been registered by the EPA. 5 p. (NAL Call No.: Document available from source.). (NAL Call No.: FS 525D).

0109

Cultural practices affecting season-long weed control in irrigated corn (Zea mays) (Maize, layby herbicide applications, Nebraska).

Moomaw, R.S. Martin, A.R. Champaign, Ill. : Weed Science Society of America. Weed science. July 1984. v. 32 (4). p. 460-467. Includes 14 references. (NAL Call No.: 79.8 W41).

0110

Effect of a pre-irrigation period on the activity of ethofumesate applied to dry soil (Herbicide to control winter annual grasses).

McAuliffe, D. Appleby, A.P. Champaign, Ill., Weed Science Society of America. Weed science. Nov 1981. v. 29 (6). p. 712-717. 26 ref. (NAL Call No.: 79.8 W41).

0111

The effect of sprinkler irrigation on herbicide efficacy, distribution, and penetration in some Coastal Plain soils (Applied on corn, peanuts and soybeans, weed control, southwest Georgia).

Dowler, C.C. GARRA, Rohde, W.A.; Fetzer, L.E.; Scott, D.E. Sr.; Sklany, T.E. Athens : The Stations. Research report - University of Georgia, College of Agriculture, Experiment Stations. Aug 1982. Aug 1982. (281). 27 p. ill. Includes references. (NAL Call No.: S51.E22).

0112

Effect of trickle irrigation on soil-applied herbicides.

Koren, E; Shlevin, E. Weed Res. Apr 1977. Vol. 17 (2): pp. 133-138. (NAL Call No.: 79.8 W412).

0113

Evaluating weed control and crop tolerance of soil- and foliar-active herbicides applied in the fall and spring to furrow-irrigated potatoes (Oregon).

Stranger, C.E. OASPA. Corvallis : The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1983. June 1983. (683). p. 77-84. (NAL Call No.: 100 OR3M).

0114

Evaluation of rice herbicides applied by sprinkler irrigation.

Mermoud, D.E. Ferguson, J.A.; Talbert, R.E. Auburn, Ala., The Society. Proceedings - Southern Weed Science Society. 1980. 1980. (33d). p. 177-183. ill. 7 ref. (NAL Call No.: 79.9 S08).

0115

Fall-applied herbicides for annual weed control in furrow-irrigated peppermint and spearmint (Tolerance, Oregon).

Stranger, C.E.OASPA. Corvallis : The Station. Special report - Agricultural Experiment Station, Oregon State University. June 1983. June 1983. (683). p. 26-29. (NAL Call No.: 100 OR3M).

0116

Herbicide application with sprinkler irrigation Abstract only .

Wiese, A F; Turner, W E. Proc South Weed Sci Soc. 1978. Vol. 31: pp. 100. (NAL Call No.: 79.9 S08).

0117

Herbicides and herbigation in potato production.

Qualls, M. Proc Annu Wash Potato Conf Trade Fair Wash State. 1977. Vol. 16th: pp. 11. (NAL Call No.: SB211.P8W3).

0118

Herbigation--new idea in weed control.

Miller, V. Prog Farmer (Birmingham). June 1976. Vol. 91 (6): pp. 22-23. (NAL Call No.: 6 T311).

0119

Herbigation--new weed control tool Irrigation .

Razee, D. Agrichem Age. Jan/Feb 1975. Vol. 18 (1): pp. 14, 17. (NAL Call No.: 381 AG85).

0120

Herbigation--the application of herbicides through irrigation systems.

Bendixen, W.E. Sacramento : California Weed Conference Office. Proceedings - California Weed Conference. 1983. Paper presented at the 35th Annual California Weed Conference on "The Challenge to Education as it Affects Agriculture", January 17-20, 1983, San Jose, California. 1983. (35th). p. 88-89. (NAL Call No.: 79.9 C122).

0121

Herbigation: a growing concept in herbicide application.

Fert Solu. Jan/Feb 1975. Vol. 19 (1): pp. 48, 50, 52. (NAL Call No.: 57.8 S04).

0122

Herbigation: applying herbicides through sprinkler systems.

Heikes, E. Champaign, Ill. Weeds today. Winter 1979. v. 10 (1). p. 7-9. ill. (NAL Call No.: SB610.W4).

0123

Herbigation fits into weed control program.

Am Veg Grow. May 1976. Vol. 24 (5): pp. 32, 34. (NAL Call No.: 80 C733).

0124

Herbigation newest weed control Herbicides in irrigation water weapon.

Fischbach, P E. Am Veg Grow. May 1975. Vol. 23 (5): pp. 22-23. (NAL Call No.: 80 C733).

0125

Layby herbicide application for season-long weed control in irrigated corn (Zea mays).

Moomaw, R.S.WEESA. Martin, A.R.; Wilson, R.G. Jr. Champaign : Weed Science Society of America. Weed science. Jan 1983. v. 31 (1). p. 137-140. 6 ref. (NAL Call No.: 79.8 W41).

0126

Making herbigation effective Equipment and techniques needed for effective application of herbicides in irrigation water .

Farm Chem. Mar 1977. Vol. 140 (3): pp. 50, 52. (NAL Call No.: S583.F3).

0127

Some comments on chemical control of Mimosa pigra with emphasis on aerial application (Weeds, herbicides, in irrigation systems, reservoirs, rivers, Thailand).

Ratanawaraha, C. Corvallis, Or. : International Plant Protection Center, 1983. Mimosa pigra management : proceedings of an international symposium, February 22-26, 1982, Chiang Mai, Thailand / G.L. Robert and D.H. Habeck, co-editors. p. 99-106. ill. (NAL Call No.: SB615.M47M54).

0128

Sprinkler application of a sugarbeet herbicide Chenopodium murale .

Cudney, D W; Worker, G F Jr; Hill, J E. California, Agricultural Experiment Station. Calif Agric. Aug 1976. Vol. 30 (8): pp. 12. (NAL Call No.: 100 C12CAG).

(WEEDS)

0129

Sprinkler applied herbicides.

Mulliner, H R. Irrig Age. Sept 1972. Vol. 7
(2): pp. 7, 33. (NAL Call No.: TC801.I7).

0130

A sprinkler system for research on applying herbicides in irrigation water.

Ogg, A.G. Jr. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1980. v. 28 (2). p. 201-203. ill. 13 ref. (NAL Call No.: 79.8 W41).

0131

Successful herbigation requires uniform application Application of herbicides through sprinkler systems .

Shearer, M N. Agrichem Age. Jan/Feb 1977. Vol. 20 (1): pp. 21-22, 24. (NAL Call No.: 381 AG85).

0132

Uniform water distribution needed for herbigation Weed control .

Hagood, M A. Proc Annu Wash Potato Conf Trade Fair Wash State. 1977. Vol. 16th: pp. 19-20. (NAL Call No.: SB211.P8W3).

0133

Weed control after chemigation with low rates of metham (Soil fumigant on New Jersey vegetable farms.

Teasdale, J.R.PNWSB. Adams, P.B.; Johnston, S.A. Beltsville : The Society. Proceedings - annual meeting of the Northeastern Weed Science Society. 1983. 1983. (37th). p. 258-262. Includes references. (NAL Call No.: 79.9 N814).

0134

Weed management tool, herbigation for irrigated cropland.

Siefert, W. Crops Soils. Feb 1976. Vol. 28 (5): pp. 10-11. (NAL Call No.: 6 W55).

0135

Why use chemigation (Application of fertilizers, herbicides, insecticides and fungicides through an irrigation system).

Harrison, K.A. Skinner, R.E. Athens, Ga., The Service. Circular - Cooperative Extension Service, University of Georgia. Mar 1981. Mar 1981. (736). 2 p. ill. (NAL Call No.: 275.29 G29C).

PESTICIDES - GENERAL

0136

Application of pesticides via drip irrigation systems / by Bruno Yaron ... (et al.).
Yaron, Bruno. Bet Dagan, Israel BARD 1983.
Cooperating institution: USDA, ARS ~"April 20, 1983. ~"Final report. ~"Project no. I-95-79.".
i, 136 leaves : ill. ; 26 cm. Bibliography:
leaves 68-75. (NAL Call No.: S619.T74A66).

0137

Behavior of bromacil and napropamide in soils. II. Distribution after application from a point source (Pesticides, irrigation).
Gerstl, Z. SSSUD. Yaron, B. Madison : The Society. Journal - Soil Science Society of America. May/June 1983. v. 47 (3). p. 478-483.
ill. Includes references. (NAL Call No.: 56.9 S03).

0138

Chemical weed control in corn : 1981.
Wrage, Leon J. Arnold, W. E. Document available from: South Dakota State University, Ag. Information Bulletin Room, Extension Building, Brookings, South Dakota 57007 1981. This publication contains registered EPA herbicides for corn. Herbicide suggestions, reduced tillage systems furrow and top plant, band vs. broadcast, and irrigated corn are the topics discussed. 8 p. (NAL Call No.: Document available from source.). (NAL Call No.: FS 525C).

0139

Chemical weed control in sorghum : 1981.
Wrage, Leon J. Arnold, W. E. Document available from: South Dakota State University, Ag. Information Bulletin Room, Extension Building, Brookings, South Dakota 57007 1981. This publication discusses herbicide suggestions, band vs. broadcast application, reduced tillage systems, and sorghum irrigation. The herbicides included have been registered by the EPA. 5 p. (NAL Call No.: Document available from source.). (NAL Call No.: FS 525D).

0140

Chemigation fascination (Application of fertilizers, herbicides, insecticides, and fungicides through irrigation systems).
Willoughby, Ohio : Meister Publishing Company. American vegetable grower and greenhouse grower. Apr 1982. v. 30 (4). p. 10, 13. (NAL Call No.: 80 C733).

0141

Chemigation: new way to get crops to take their medicine (Pesticides application, irrigation).
Threadgill, E.D. Athens, Ga., The Stations. Georgia agricultural research - Georgia Experiment Stations. Spring 1982. v. 22 (4). p. 16-17. ill. (NAL Call No.: 100 G295).

0142

Chemigation: using center pivot and linear move systems (Chemical application through irrigation).
Reese, L.E. Loudon, T.L.; Potter, H.S. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2100). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0143

Chemigation via sprinkler irrigation: current status and future development (Chemical application through irrigation).
Threadgill, E.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2097). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0144

Droplet size of oil formulated insecticides generated in irrigation water during chemigation.
Groselle, D.E. Stansell, J.R.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2098). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

(PESTICIDES - GENERAL)

0145

The effect of sprinkler irrigation on herbicide efficacy, distribution, and penetration in some Coastal Plain soils (Applied on corn, peanuts and soybeans, weed control, southwest Georgia). Dowler, C.C.GARRA. Rohde, W.A.; Fetzer, L.E.; Scott, D.E. Sr.; Sklany, T.E. Athens : The Stations. Research report - University of Georgia, College of Agriculture, Experiment Stations. Aug 1982. Aug 1982. (281). 27 p. ill. Includes references. (NAL Call No.: S51.E22).

0146

Fungigate and cut spray costs (Application of fungicides while irrigating, USA). Potter, H.S. Willoughby, Ohio : Meister Publishing Company. American vegetable grower. Apr 1983. v. 31 (4). p. 8-10, 30-31, 33-34. ill. (NAL Call No.: 80 C733).

0147

Herbicide residues in soils following point source application (vi drip irrigation). Yaron, B. Gerstl, Z. Oxford : Pergamon Press, c1983. Pesticide chemistry : human welfare and the environment : proceedings of the 5th International Congress of Pesticide Chemistry, Kyoto, Japan, 29 August-4 September 1982 / editors-in-chief, J. Miyamoto and P.C. Kearney. p. 207-212. ill. Includes references. (NAL Call No.: SB951.I562 1982 V.4).

0148

Influences of rainfall and sprinkler irrigation on the residual activity of insecticides applied to corn for control of adult western corn rootworm (Coleoptera:Chrysomelidae) (Diabrotica virgifera virgifera). Mayo, Z.B. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 190-193. Includes references. (NAL Call No.: 421 J822).

0149

Irrigation as an integral management tool in pecans (for applying nutrients and pesticides). Aitken, J.B. Camp, C.R. Starkville : The Association. Proceedings ... annual convention - Southeastern Pecan Growers Association. 1983. 1983. (76th). p. 59-65. ill. Includes references. (NAL Call No.: 94.69 G29).

0150

Mobility and persistence of carbendazole (fungicides) applied to soil via drip irrigation (to control Phoma tracheiphila, in a lemon grove). Solel, Z. Sandler, D. St. Paul, Minn., American Phytopathological Society. Phytopathology. Dec 1979. v. 69 (12). p. 1273-1277. ill. 22 ref. (NAL Call No.: 464.8 P56).

0151

Nematocide residues in pineapple culture following point source application (through drip irrigation systems, Hawaii, Rotylenchulus reniformis). Hylin, V. Hylin, J.W.; Apt, W. Oxford : Pergamon Press, c1983. Pesticide chemistry : human welfare and the environment : proceedings of the 5th International Congress of Pesticide Chemistry, Kyoto, Japan, 29 August-4 September 1982 / editors-in-chief, J. Miyamoto and P.C. Kearney. p. 213-216. ill. Includes references. (NAL Call No.: SB951.I562 1982 V.4).

0153

Use of center pivot simulator for chemigation research (Chemical application through irrigation). Cochran, D.L. Threadgill, E.D.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2099). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0152

Use of center pivot simulator for chemigation research (Chemical application through irrigation). Cochran, D.L. Threadgill, E.D.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2099). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

SOIL SCIENCE

0154

The leaching of nitrates, as influenced by the rates of irrigation and the timing of fertilizer application to wheat on a sandy soil.

Chaudhary, T N; Bhatnagar, V K. Indian J Ecol. July 1976. Vol. 3 (2): pp. 125-131. Ref. (NAL Call No.: QH540.I56).

SOIL CHEMISTRY AND PHYSICS

0155

Behavior of bromacil and napropamide in soils.
II. Distribution after application from a point
source (Pesticides, irrigation).

Gerstl, Z. SSSJD. Yaron, B. Madison : The
Society. Journal - Soil Science Society of
America. May/June 1983. v. 47 (3). p. 478-483.
ill. Includes references. (NAL Call No.: 56.9
S03).

0156

The effect of sprinkler irrigation on herbicide
efficacy, distribution, and penetration in some
Coastal Plain soils (Applied on corn, peanuts
and soybeans, weed control, southwest Georgia).

Dowler, C.C. GARRA. Rohde, W.A.; Fetzer, L.E.;
Scott, D.E. Sr.; Sklany, T.E. Athens : The
Stations. Research report - University of
Georgia, College of Agriculture, Experiment
Stations. Aug 1982. Aug 1982. (281). 27 p. ill.
Includes references. (NAL Call No.: S51.E22).

0157

Nitrogen balance in a citrus orchard (Shamouti
orange, fertilizer and irrigation applications,
Israel).

Dasberg, S. Erner, Y.; Bielorai, H. Madison,
Wis. : American Society of Agronomy. Journal of
environmental quality. July/Sept 1984. v. 13
(3). p. 353-356. Includes references. (NAL Call
No.: QH540.J6).

0158

Nitrogen leaching during sprinkler irrigation
of a Dutch clay soil (Fertilizer application to
wet soil surfaces, Netherlands).

Dekker, L.W. Bouma, J. Amsterdam : Elsevier
Scientific. Agricultural water management. June
1984. v. 9 (1). p. 37-45. ill. Includes
references. (NAL Call No.: S494.5.W3A3).

0159

Viruses in groundwater beneath sewage irrigated
cropland (Land application, coxsackievirus).

Goyal, S.M. Keswick, B.H.; Gerba, C.P. Oxford :
Pergamon Press. Water research. 1984. v. 18
(3). p. 299-302. Includes references. (NAL Call
No.: TD420.W3).

SOIL FERTILITY - FERTILIZERS

0160

Ammonia losses during sprinkler application of animal wastes.
Pote, J.W. Miner, J.R.; Koelliker, J.K. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1980. v. 23 (5). p. 1202-1206, 1212. ill. 22 ref. (NAL Call No.: 290.9 AM32T).

0161

Application of fertilizers through irrigation water.
Hagin, J. Paris : Institut national de la recherche agronomique, (1980?). Les Phenomenes de transport de l'eau et des solutes et l'irrigation : colloque franco-israelien, Avignon, 12-13-14 mai 1980. p. 89-96. 13 ref. (NAL Call No.: S618.P5 1980).

0162

Application of the wastewater effluent of a rural community to a mountain meadow (Colorado).
Barbarick, K.A. Sabey, B.R.; Evans, N.A. Washington, D.C., The Federation. Journal - Water Pollution Control Federation. Jan 1982. v. 54 (1). p. 70-76. 29 ref. (NAL Call No.: 293.8 SE8).

0163

Apply nitrogen through sprinklers: here's a cheap, simple method (Fertilizer application, equipment).
Rennie, G. Wellington, N.Z., G. Deslandes Ltd. New Zealand journal of agriculture. Nov 1981. v. 143 (5). p. 35-36. (NAL Call No.: 23 N48J).

0164

Applying chemicals through irrigation systems (Fertilizers).
Holman, H.P. Tampa, Fla., Kyle Publishing Co. Citrus and vegetable magazine. Feb 1980. v. 43 (6). p. 22-24, 43-44. ill. (NAL Call No.: 80 C498).

0165

Applying liquid fertilizer materials with sprinkler irrigation equipment.
Bergeaux, P.J. Athens. 1973. Vol. 6 p. illus.: (NAL Call No.: 275.29 G29C n0.658).

0166

Applying nutrients and other chemicals to trickle-irrigated crops (Plant requirements, irrigation systems).
Rolston, D.E. Rauschkolb, R.S. Berkeley, Calif., The Service. Bulletin. California. University, Berkeley. Cooperative Extension Service. Aug 1979. Aug 1979. (1893). 14 p. ill. 17 ref. (NAL Call No.: S39.A2C3).

0167

Applying nutrients in irrigation water (Fertilizers, lime, New Zealand).
Syers, K. Auckland : New Zealand Newspapers. The New Zealand farmer. Oct 27, 1983. v. 104 (20). p. 42-43, 45. ill. (NAL Call No.: 23 N484).

0168

Applying slow-release fertilizer in container nurseries with capillary watering.
Havis, J.R. Chicago, Ill., American Nurseryman Publishing Co. American nurseryman. Aug 15, 1982. v. 156 (4). p. 24-26, 28, 30, 32. ill. 5 ref. (NAL Call No.: 80 AM371).

0169

Chemigation fascination (Application of fertilizers, herbicides, insecticides, and fungicides through irrigation systems).
Willoughby, Ohio : Meister Publishing Company. American vegetable grower and greenhouse grower. Apr 1982. v. 30 (4). p. 10, 13. (NAL Call No.: 80 C733).

0170

Chemigation: using center pivot and linear move systems (Chemical application through irrigation).
Reese, L.E. Loudon, T.L.; Potter, H.S. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2100). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

(SOIL FERTILITY - FERTILIZERS)

0171

Corn yield as influenced by in-season application of nitrogen with limited irrigation (Zea mays).

Anderson, C.K. Stone, L.R.; Murphy, L.S. Madison, Wis., American Society of Agronomy. Agronomy journal. Mar/Apr 1982. v. 74 (2). p. 396-401. Includes 18 ref. (NAL Call No.: 4 AM34P).

0172

Design factors for the rapid infiltration, overland flow, and slow rate irrigation wastewater land application systems.

Culp, G. Hinrichs, D. New York : Academic Press, 1981. Municipal wastewater in agriculture / edited by Frank M. D'Itri, Jorge Aguirre Martinez, Mauricio Athie Lambarri. p. 389-426. ill. Includes references. (NAL Call No.: TD760.I57 1980).

0173

A design procedure for land application (of wastewater, in the food-processing industry, recycling nutrients and water through cover crop irrigation and groundwater).

Kroeker, E.J. Lamb, A.; Haskill, J.M. Springfield, Va., The Service. PB - U. S. National Technical Information Service. United States. National Technical Information Service. Aug 1978. Aug 1978. (289 761). p. 149-172. ill. 5 ref. (NAL Call No.: 157.8 R29).

0174

Does surface applied phosphorus fertilizer move in sandy loam soils under sprinkler irrigation? /; Milton Workman. -.

Workman, Milton. Fort Collins : Agricultural Experiment Station, Colorado State University.. 1975. Vol. 2 p. -: (NAL Call No.: 100 C71C No.75-32).

0175

Effect of continuous application of manures and fertilizers on some of the physical properties of soil. II. Under irrigated condition.

Manickam, T S; Venkataramanan, C R. Madras Agr J. Sept/Oct 1972. Vol. 59 (9/10): pp. 508-512. (NAL Call No.: 22 M262).

0176

Effect of continuous application of manures and fertilizers on some of the physicochemical and microbiological properties of soil under irrigated condition.

Ramaswami, P.P. Raj, D.; Selvaraj, K.V. Hebbal, Bangalore, University of Agricultural Sciences. The Mysore journal of agricultural sciences.

1979. v. 13 (2). p. 167-170. ill. 7 ref. (NAL Call No.: S19.M9).

0177

Effect of continuous application of organic manure and inorganic fertilizer with and without irrigation on the yield and quality of chewing tobacco (Nicotiana tabacum L.) in sandy loam calcareous soils of North Bihar.

Sinha, R; Pandey, R G; Dwivedi, S S L. Tob Res. Dec 1976. Vol. 2 (2): pp. 94-108. Ref. (NAL Call No.: SB273.T64).

0178

Effect of fertilization and CCC (chlor-choline-chloride) application on winter wheat grown under irrigation (Growth inhibition to control lodging, Triticum).

Malesevic, M. Jevtic, S. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 187-189. (NAL Call No.: S612.2.W3).

0179

Effect of fertilizer application on the yield of irrigated summer Cambodia cotton.

Balasundaram, C.S. Velu, V.; Ramkumar, R.K. Bombay, Directorate of Cotton Development. Cotton development. Dct 1980/Jan 1981. v. 10 (3/4). p. 6-8. ill. 8 ref. (NAL Call No.: SB251.I5C6).

0180

Effect of land levelling (including application of fertilizers/manures) and irrigation on wheat yield.

Khattak; J.K. Larsen, K.E.; Rashid, A.; Khattak, R.A.; Khan, S.U. Tokyo, Farm Machinery Industrial Research Corp. AMA, agricultural mechanization in Asia. Winter 1981. v. 12 (1). p. 11-14, 18. ill. 11 ref. (NAL Call No.: S760.A75A35).

0181

Effect of moisture regimes and level of fertilizer application on yield and water requirement of jute (Corchorus olitorius L. and Corchorus capsularis L.) (Irrigation, jute varieties, India).

Patel, C.S. Mandal, A.K. Cambridge : Cambridge University Press. The Journal of agricultural science. Oct 1983. v. 101 (pt.2). p. 311-316. Includes references. (NAL Call No.: 10 J822).

0182

Effect of organic matter and gypsum application on the grain yield of wheat irrigated with brackish water (Hissar area).

Singh, H.IJAGA. Sharma, H.C. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 454-456. (NAL Call No.: 22 IN235).

0183

The effect of splitting phosphorus and potassium application with regard to mineral contents and grass yield of *Digitaria decumbens* Stent. (pangola) with irrigation.

Avila Lopez, A. Ocampo, G. Berlin, Akademie-Verlag, c1980. XIII International Grassland Congress : Leipzig, German Democratic Republic, 18-27 May, 1977, editors of congress proceedings, E. Wojahn and H. Thoms. International Grassland Congress (13th : 1977 : Leipzig, Germany). p. 1109-1111. 5 ref. (NAL Call No.: SB197.I5 1977).

0184

Effect of trickle irrigation, nitrogen rate, and method of nitrogen application on field-grown Japanese holly (*Ilex crenata*).

Eakes, D.J. Gilliam, C.H.; Ponder, H.G. Auburn, Ala. : The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Summer 1984. v. 31 (2). p. 17. ill. (NAL Call No.: 100 AL1H).

0185

Efficiency of water use and applied nitrogen in barley grown with stored soil moisture, supplemental irrigation and nitrogen application (*Hordeum vulgare*, India).

Cheema, S.S. Walia, A.S.; Kundra, H. New Delhi, Indian Council of Agricultural Research. The Indian journal of agricultural sciences. June 1982. v. 52 (6). p. 378-383. 13 ref. (NAL Call No.: 22 AG83I).

0186

Environmental planning for wastewater land application: lessons from Penn State's "living filter" (Irrigation, Pennsylvania).

Ferguson, B.K. Amsterdam, Netherlands : Elsevier. Landscape planning. Oct 1983. v. 10 (3). p. 205-218. ill., maps. Includes references. (NAL Call No.: QH75.A1L3).

0187

Fertigation--management and techniques (Fertilizer application by irrigation water).

Manor, S. Paris : Institut national de la recherche agronomique, (1980?). Les Phenomenes de transport de l'eau et des solutes et l'irrigation : colloque franco-israelien, Avignon, 12-13-14 mai 1980. p. 83-87. (NAL Call No.: S618.P5 1980).

0188

Fertigation (application of fertilizer with water) as applied to tomatoes in Kula.

Miyaguchi, T. Honolulu. Miscellaneous publication Hawaii. University. Cooperative Extension Service. Apr 1979. Apr 1979. (171). p. 35-37. ill. (NAL Call No.: S544.3.H3H3).

0189

Fertigation (application of fertilizer with water) of Macadamia?.

Yamaguchi, A. Honolulu. Miscellaneous publication Hawaii. University. Cooperative Extension Service. Apr 1979. Apr 1979. (171). p. 38-39. ill. (NAL Call No.: S544.3.H3H3).

0190

Fertigation: applying fertilizer through the irrigation system Golf courses .

Snyder, G H; Burt, E O. Grounds Maint. Nov 1978. Vol. p. 60-62.: (NAL Call No.: SB476.G7).

0191

Fertigation (applying liquid fertilizers through an irrigation system).

Sincerbeau, S.A. Far Hills, N.J., United States Golf Association. USGA Green Section record. May/June 1979. v. 17 (3). p. 10-12. ill. (NAL Call No.: 60.18 UN33).

0192

"Fertigation" fertilizing through irrigation (in avocado groves).

Affleck, M.E. Vista, Calif., Rancher Publications. Avocado grower. May 1979. v. 3 (5). p. 26-29. ill. (NAL Call No.: SB379.A9A9).

0193

Fertigation: role in pecan production (Application of fertilizers through drip irrigation system).

Aitken, J.B. Starkville, Miss. : The Association. Proceedings ... annual convention - Southeastern Pecan Growers Association. 1984. 1984. (77th). p. 121-125. Includes references.

(SOIL FERTILITY - FERTILIZERS)

(NAL Call No.: 94.69 G29).

0194

Fertigation (the addition of fertilizer and other chemicals to irrigation water) gains increasing acceptance.

Beth, F. Melbourne, John Kennedy Associates. Irrigation farmer. Sept 1981. v. 8 (3). p. 2. (NAL Call No.: SB112.A1I77).

0195

The fertility of paddy soils and fertilizer applications for rice /; Compiled by Food and Technology Center for the Asian and Pacific Region. -.

Asian and Pacific Council., Food and Fertilizer Technology Center. Taipei : Food & Fertilizer Technology Center., 1976. Twelve papers from the seminar "The Fertility of Paddy Soils held July 1976 in Taipei. Includes bibliographical references. Vol. 249 p: pp. ill. (NAL Call No.: S597.A8).

0196

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. IV. Urea and ammonium sulphate as nitrogen fertilizers (Wheat, Triticum).

Haggag, M. Salam, A.; Amer, S.; El-Kiesh, R.; Abed, A.H. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 325-328. 14 ref. (NAL Call No.: S612.2.W3).

0197

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. V. Effectiveness of banding and broadcasting of fertilizer phosphorus (Triticum).

Amer, S. Salam, A.; Haggag, M.; Khattab, F.; Gallab, R. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 329-331. 6 ref. (NAL Call No.: S612.2.W3).

0199

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. II. Effect on yield of different rates of N and P (nitrogen and phosphorus) applied separately or combined. Amer, S. Haggag, M.; Salam, A.; El-Bakori, E. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 317-319. 8 ref. (NAL Call No.: S612.2.W3).

0198

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. III. Yield response to one dose vs. split application of fertilizer nitrogen (Triticum, wheat).

Haggag, M. Salam, A.; Amer, S.; El-Shalwi, M.; Ahmed, E. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 321-324. 12 ref. (NAL Call No.: S612.2.W3).

0200

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. I. Elucidation of application necessity for nitrogen, phosphorus and/or potassium (El Marj red brown clay, Tajoura loamy sand, wheat, Triticum).

Salam, A. Amer, S.; Haggag, M.; El-Shraidi, A. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 313-315. 9 ref. (NAL Call No.: S612.2.W3).

0201

Fertilizer application in irrigation water.

Howell, J V; Baker, J M. Okla State Univ Coop Ext Serv OSU Ext Facts. July 1972. Vol. 2405, 3 p.: (NAL Call No.: S544.3.0505).

0202

Fertilizer application through a drip irrigation system (Methods).

Gitlin, H. Honolulu : The Institute. Research extension series - Hawaii Institute of Tropical Agriculture and Human Resources. Apr 1982. Apr 1982. (O17). p. 15-17. (NAL Call No.: S481.R4).

0203

Fertilizer application through the drip system at Olokele Sugar Company.

Ferguson, R.D. Aiea : The Technologists. Reports...Annual conference - Hawaiian Sugar Technologists. 1982. 1982. (40th). p. 92-93. (NAL Call No.: 65.9 H317).

0204

The influence of heavy application of mineral fertilizers and of irrigation on vegetable yields.

Borna, Z. Acta Hortic. 1973. Vol. 29: pp. 385-391. (NAL Call No.: 80 AC82).

0205

The influence of rate and placement of phosphorus in the fertigation of tomatoes in the Lower Jordan Valley (report for 1974/75).
Albasel, N. Spec Publ Agric Res Organ Volcani Cent Div Sci Publ. 1977. Vol. 84, 11 p.: (NAL Call No.: S543.A35A35).

0206

Inorganic constituents of sugarcane juice as influenced by irrigation and fertiliser application.

Srinivasan, T.R. Morachan, Y.B. New Delhi, Indian Sugar Mills Association. Indian sugar. Oct 1978. v. 28 (7). p. 443-439. ill. 12 ref. (NAL Call No.: 65.8 IN26).

0207

Interaction of slaughterhouse effluent protein with three New Zealand soils (Waste disposal, irrigation application, New Zealand).

Russell, J.M. Wellington, New Zealand, Dept. of Scientific and Industrial Research, Science Information Division. New Zealand journal of agricultural research. 1982. v. 25 (1). p. 21-26. Ref. (NAL Call No.: 23 N4892).

0208

Interactive effects of soil salinity, fertility, and irrigation on field corn (Applied nitrogen fertilizer).

Selassie, T.G. Wagenet, R.J. Berlin, Springer. Irrigation science. 1981. v. 2 (2). p. 67-78. ill. 35 ref. (NAL Call No.: S612.I756).

0209

Irrigation system effects on applied fertilizer nitrogen movement in soil (and effect on maize yields).

Onken, A.B. Wendt, C.W. Madison, Wis. Soil Science Society of America journal Soil Science Society of America. Mar/Apr 1979. v. 43 (2). p. 367-372. ill. 17 ref. (NAL Call No.: 56.9 S03).

0210

Irrigation water and N (nitrogen) fertilizer application efficiencies for reduction of water and N losses and for water pollution control.

Paltineanu, J.C. Hera, C.; Paltineanu, R.; Idriceanu, A.; Eliade, G.h.; Suteu, Gh.; Bologa, M.; Canarache, A.; Postolache, T.; Apostol, I. Vienna, International Atomic Energy Agency. Proceedings ... meeting on Soil nitrogen as fertilizer or pollutant. 1978 (pub. 1980). 1978 (pub. 1980). p. 169-193. ill. Includes 13 ref. (NAL Call No.: TD427.F45S65).

0211

Irrigation water application of soluble agricultural chemicals. Fertilizers.

Marsh, A W. Proc Calif Plant Soil Conf. 1973. Vol. p. 36-37.: (NAL Call No.: S590.A1C3).

0212

Land application and recycling of industrial waste through forages (Spray irrigation, plant nutrients, legumes, grasses).

Turner, D.O. Kaser, W.L. Argonne, Ill., Argonne National Laboratory. Proceedings ... Energy optimization of water and wastewater management for municipal and industrial applications conference. 1979 (pub. 1980). v. 1. p. 429-436. Includes 3 ref. (NAL Call No.: TD653.U5).

0213

Land application of brewery wastewater (Environment pollution control, source of plant nutrients and irrigation water in turf operation).

Keith, L.W. Madison, Wis., The Association. Technical quarterly - Master Brewers Association of the Americas. Oct/Dec 1981. v. 18 (4). p. 201-204. ill. (NAL Call No.: 390.9 M39T).

(SOIL FERTILITY - FERTILIZERS)

0214

Land application of wastewater (through irrigating crops).

Reynolds, J.H. Washington, D.C., The Federation. Journal - Water Pollution Control Federation. June 1982. Review of 1981 literature. v. 54 (6). p. 673-675. 26 ref. (NAL Call No.: 293.8 SE8).

0215

Line-source sprinkler systems for experimentation with sprinkler-applied nitrogen fertilizers.

Lauer, D.A.S.S.U.D. Madison : The Society. Journal - Soil Science Society of America. Jan/Feb 1983. v. 47 (1). p. 124-128. ill. 8 ref. (NAL Call No.: 56.9 S03).

0216

A method of economic analysis applied to nitrogen fertilizer rate experiments on irrigated corn by J.L. Paschal and B.L. French.

Paschal, J. L. (James L.). Washington, D.C. U.S. Dept. of Agriculture 1956. 73 p. : ill. -. Bibliography: p. 62-63. (NAL Call No.: Fiche S-69 no.1141).

0217

Nitrate movement in sandy soil under varying water and fertilizer management (Irrigation and urea application).

Gupta, S.K. Chaudhary, T.N.; Pandey, R.N. East Melbourne, Australia, Commonwealth Scientific and Industrial Research Organization. Australian journal of soil research. 1982. v. 20 (3). p. 225-232. 10 ref. (NAL Call No.: 56.8 AU7).

0218

Nitrogen application timing and source for drip irrigated tomatoes (*Lycopersicon esculentum*).

Locascio, S.J. Myers, J.M.; Fiskell, J.G.A. Slough, UK : Commonwealth Agricultural Bureaux, c1982. Plant nutrition 1982 : proceedings of the ninth International Plant Nutrition Colloquium, Warwick University, England, August 22-27, 1982 / edited by A. Scaife. p. 323-328. Includes references. (NAL Call No.: QK867.C65 1982).

0219

Nitrogen "fertigation" of Shamouti oranges (Nitrogen fertilizer supplied in the irrigation water).

Dasberg, S.PLS0A2. Bielcorai, H.; Erner, J. The Hague : Martinus Nijhoff. Plant and soil. 1983. v. 75 (1). p. 41-49. Includes references. (NAL Call No.: 450 P696).

0220

Nitrogen leaching during sprinkler irrigation of a Dutch clay soil (Fertilizer application to wet soil surfaces, Netherlands).

Dekker, L.W. Bouma, J. Amsterdam : Elsevier Scientific. Agricultural water management. June 1984. v. 9 (1). p. 37-45. ill. Includes references. (NAL Call No.: S494.5.W3A3).

0221

Nitrogen leaching in bermudagrass (Cynodon X Magenisii) turf: Daily fertigation vs. tri-weekly conventional fertilization.

Snyder, G.H. Burt, E.O.; Davidson, J.M. Madison, Wis., American Society of Agronomy, c1980. Proceedings of the third International Turfgrass Research Conference / James B. Beard, editor. Munich). p. 185-193. ill. Bibliography p. 193. (NAL Call No.: SB433.I57 1977).

0222

Note on the effect of irrigation water containing boron applied at different growth stages of wheat.

Bharadwaj, V. Tripathi, B.R. New Delhi, Indian Society of Soil Science. Journal of the Indian Society of Soil Science. Dec 1981. v. 29 (4). p. 570-571. Includes 7 ref. (NAL Call No.: 56.9 IN2).

0223

Nutrient uptake of rice variety Jaya at different levels and timings of nitrogen application under two systems of water management.

Pillai, K.G. De, R. Bangalore, The Academy. Proceedings. Plant sciences - Indian Academy of Sciences. Aug 1981. v. 89 (4). p. 257-267. ill. 22 ref. (NAL Call No.: QK1.I48).

0224

Optimizing nitrogen fertigation and rooting volume of unprotected drip-irrigated tomato (Fertilization).

Bar-Yosef, B. Paris : Institut national de la recherche agronomique, (1980?). Les Phenomenes de transport de l'eau et des solutes et l'irrigation : colloque franco-israelien, Avignon, 12-13-14 mai 1980. p. 97-105. ill. 6 ref. (NAL Call No.: S618.P5 1980).

0225

Relative performance of some promising varieties of barley at different rates of N (nitrogen) application under irrigated conditions.

Mishra, B.N. Singh, K.N. New Delhi, Indian Society of Agronomy. Indian journal of

agronomy. Sept 1980. v. 25 (3). p. 419-422.
Includes 7 ref. (NAL Call No.: 22 IN235).

No.: 4 AM34P).

0226

Reponse of spring cowpea to irrigation and phosphorus application.
Ahlawat, I.P.S. Saraf, C.S.; Singh, A. New Delhi, Indian Society of Agronomy. Indian journal of agronomy. June 1979. v. 24 (2). p. 237-239. ill. 7 ref. (NAL Call No.: 22 IN235).

0232

Response of wheat to irrigation schedules in relation to rate and times of nitrogen application (Effects on yields, India).
Koshta, L.D.IJAGA. Raghu, J.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Sept 1981. v. 26 (3). p. 262-266. 7 ref. (NAL Call No.: 22 IN235).

0227

Response of barley to nitrogen application under graded levels of irrigation.
Hooda, R.S. Kalra, G.S. Karnal, Agricultural Research Communication Centre. Indian journal of agricultural research. Sept 1979. v. 13 (3). p. 143-146. ill. 4 ref. (NAL Call No.: S3.I5).

0233

Responses of soybean to irrigation and phosphate application in Chambal Command (India).
Singh, U.B.UAUD. Singh, U.R. Pune : D.R. Bapat. Journal of Maharashtra agricultural universities. May 1983. v. 8 (2). p. 175. Includes references. (NAL Call No.: S471.I3J6).

0228

Response of cotton to potash application in combination with nitrogen under irrigated condition (India).
Helkiah, J. Muthuswamy, P.; Chandramohan, J.; Ramanathan, K.M.; Krishnamoorthy, K.K. Coimbatore, Tamil Nadu Agricultural University. The Madras agricultural journal. Feb 1981. v. 68 (2). p. 82-85. Includes 5 ref. (NAL Call No.: 22 M262).

0234

Results of citrus fertigation studies (Fertilizer materials through the irrigation systems, Florida).
Koo, R.C.J. s.l., The Society. Proceedings of the ... annual meeting of the Florida State Horticultural Society. 1980 (pub 1981). v. 93. p. 33-36. 8 ref. (NAL Call No.: 81 F66).

0229

Response of maize (Zea mays L.) genotypes to nitrogen application under irrigated conditions.
Halemani, H.L. Hegde, D.M.; Kudasomannavar, B.T. Hebbal, Bangalore, University of Agricultural Sciences. The Mysore journal of agricultural sciences. 1980. v. 14 (2). p. 200-205. 5 ref. (NAL Call No.: S19.M9).

0235

Revegetation tests at a uranium mill site (Includes effect of fertilizer application and irrigation on plant growth).
McDonald, W.R. Shirts, M.B. Socorro, New Mexico Bureau of Mines and Mineral Resources. Proceedings ... Mineral Waste Stabilization Liaison Committee. 1980 (pub. 1981). 1980 (pub. 1981). p. 121-133. ill. (NAL Call No.: TD899.M47M8).

0230

Response of tomatoes to N (nitrogen) and water applied via a trickle irrigation system. I. Nitrogen.
Bar-Yosef, B. Sagiv, B. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1982. v. 74 (4). p. 633-637. 5 ref. (NAL Call No.: 4 AM34P).

0236

Root zone modification: fundamentals and alternatives (To till, fertilize, lime, irrigate, drain, and apply pesticides).
Taylor, H.M. Arkin, G.F. St. Joseph, Mich., American Society of Agricultural Engineers. Modifying the root environment to reduce crop stress. 1981. 1981. p. 3-17. ill. Includes 36 ref. (NAL Call No.: S596.7.M63).

0231

Response of tomatoes to N (nitrogen) and water applied via a trickle irrigation system. II. Water.
Bar-Yosef, B. Sagiv, B. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1982. v. 74 (4). p. 637-639. 6 ref. (NAL Call

(SOIL FERTILITY - FERTILIZERS)

0237

Row crop fertigation (Fertilizer rates, tomatoes, peppers, cucumbers, through irrigation systems, California trials). Hall, B.J. Willoughby, Ohio : Meister Publishing Company. American vegetable grower and greenhouse grower. Apr 1982. v. 30 (4). p. 71, 73. (NAL Call No.: 80 C733).

0238

Saline water applications for leaching and irrigation (Chemical reclamation, of soils). Petrossian, G.P. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 107-116. 2 p. ref. (NAL Call No.: S612.2.W3).

0239

Selling advantages of fluid fertilizers: fertigation. Fischbach, P E. Fert Solutions. Nov/Dec 1972. Vol. 16 (6): pp. 73-74. (NAL Call No.: 57.8 S04).

0240

Some agronomic aspects of turf fertigation fertilization through the irrigation system. Snyder, G H; Burt, E O. USGA Green Sect Rec (U S Golf Assoc). May 1977. Vol. 15 (3): pp. 10-12. (NAL Call No.: 60.18 UN33).

0241

Spring and winter wheat grain quality when nitrogen fertilizers are applied under irrigated conditions. Stadnik, G.I. Washington, D.C., Scripta. Soviet soil science. Nov/Dec 1978 (pub. 1979). v. 10 (6). p. 658-662. 7 ref. (NAL Call No.: 57.8 P34AE).

0242

Sprinkler application of anaerobically treated swine wastes as limited by nitrogen concentration / by James Kenneth Koelliker. Koelliker, James K. 1972. Thesis (Ph.D.)--Iowa State University, 1972. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. iii, 203 leaves ; 21 cm. Bibliography: leaves 94-98. (NAL Call No.: DISS 72-19,989).

0243

Sprinkler application of phosphorus and zinc fertilizers Maize. Hergert, G W; Reuss, J O. Agron J. Jan/Feb 1976. Vol. 68 (1): pp. 5-8. (NAL Call No.: 4 AM34P).

0244

The status of manganese in the soil and rice plants under different water systems and fertilizer applications. Ghoneim, M F; el-Gibaly, M H; Hassanin, H G. Plant Soil. Oct 1974. Vol. 41 (2): pp. 313-324. Ref. (NAL Call No.: 450 P696).

0245

Studies on agrotechniques for reducing irrigation requirement with better utilization of nutrients by irrigated wheat (Fertilizer application, grain and straw yields, India). Sharma, R.P.IJAGA. Ray, S.; Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 387-392. 4 ref. (NAL Call No.: 22 IN235).

0246

Studies on fertilization of field-grown irrigated alfalfa. I. Effect of potassium source and time of application. Kafkafi, U; Gilat, R; Yoles, O; Noy, Y. Plant Soil. Jan 1977. Vol. 46 (1): pp. 165-173. Ref. (NAL Call No.: 450 P696).

0247

Studies on periodic dry-matter accumulation, nitrogen and phosphorus uptake by cauliflower (Var Snowball-16) as affected by soil moisture regimes and N and P application (Irrigation, nutrition, yields, New Delhi, India). Sharma, R.P.IJAGA. Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Mar 1982. v. 27 (1). p. 52-60. Includes references. (NAL Call No.: 22 IN235).

0248

Studies on the effect of fertilizer doses and water volumes applied at sowing time on the yield of wheat grown under dryland conditions (India). Sharma, R.P.IJAGA. Ray, S.B.; Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Sept 1981. v. 26 (3). p. 213-219. 111. 4 ref. (NAL Call No.: 22 IN235).

0249

Studies on the nitrogen and water relations of wheat. I. Growth and water use in relation to time and method of nitrogen application (Water supply).

Parameswaran, K.V.M. Graham, R.D.; Aspinall, D. Berlin, Springer. Irrigation science. 1981. v. 3 (1). p. 29-44. ill. 21 ref. (NAL Call No.: S612.I756).

0250

Studies with ¹⁵N (nitrogen isotope) on fertilization of wheat as affected by source and time of application at two moisture levels (Irrigation, India).

Sinha, M.N.IJAGA. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 413-418. 7 ref. (NAL Call No.: 22 IN235).

0251

Subsurface drainage water quality from land application of swine lagoon effluent (Livestock waste, animal waste as a nutrient source for crop production).

Evans, R.O. Westerman, P.W.; Overcash, M.R. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Mar/Apr 1984. v. 27 (2). p. 473-480. ill. Includes references. (NAL Call No.: 290.9 AM32T).

0252

Subsurface irrigation of cotton; A system and its effects upon production, with and without fertilizer application.

Williams, B C. Las Cruces. 1973 . Bibliography: p. 32. Vol. 32 p. illus.: (NAL Call No.: 100 N465 (1) No.610).

0253

Sugarbeet response to incremental application of nitrogen with high frequency sprinkler irrigation.

Roberts, S. Weaver, W.H.; Richards, A.W. Madison, Wis., The Society. Journal - Soil Science Society of America. Mar/Apr 1981. v. 45 (C 2). p. 448-449. 8 ref. (NAL Call No.: 56.9 S03).

0254

Surface application of sewage effluent and sludge (Water pollution, various methods including crop irrigation, forest application).

Sopper, W.E. Madison, Wis., Soil Science Society of America. Agronomy. A series of monographs - American Society of Agronomy. American Society of Agronomy. 1979.

1979. (21). p. 633-663. ill. Includes ref. (NAL Call No.: 4 AM392).

0255

A trickle irrigation system for frequent application of nitrogen (fertilizer) to experimental plots.

Hairston, J.E. Schepers, J.S.; Colville, W.L. Madison, Wis., The Society. Soil Science Society of America journal. Sept/Oct 1981. v. 45 (5). p. 880-882. ill. 3 ref. (NAL Call No.: 56.9 S03).

0256

Update on the land application of wastewater project at Lubbock, Texas (Sewage effluent irrigation).

Gray, J.F. Silver Spring, Md., The Association. Technical conference proceedings - Irrigation Association. 1980. 1980. p. 215-225. (NAL Call No.: 55.9 SP8).

0257

Use of center pivot simulator for chemigation research (Chemical application through irrigation).

Cochran, D.L. Threadgill, E.D.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2099). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0258

Use of center pivot simulator for chemigation research (Chemical application through irrigation).

Cochran, D.L. Threadgill, E.D.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2099). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

(SOIL FERTILITY - FERTILIZERS)

0259

46-48. (NAL Call No.: 275.29 M66S0).

Viruses in groundwater beneath sewage irrigated cropland (Land application, coxsackievirus).

Goyal, S.M. Keswick, B.H.; Gerba, C.P. Oxford : Pergamon Press. Water research. 1984. v. 18 (3). p. 299-302. Includes references. (NAL Call No.: TD420.W3).

0260

Wastewater irrigation for small communities (Land application).

Reed, S. Crites, R.; Bouzoun, J.; Martel, C.J. New York : American Society of Civil Engineers, c1982. Proceedings of the Specialty Conference on Environmentally Sound Water and Soil Management : Orlando, Fla., July 20-23, 1982 / E.G. Kruse, C.R. Burdick, and Y.A. Yousef, co-editors. p. 501-507. ill. Includes references. (NAL Call No.: TC803.S64 1982).

0261

Wheat grain quality as affected by irrigations number and rates and splitting of nitrogen fertilizer (Spacing of fertilizer application, Egypt).

Eweida, M.H.T. Hagra, A.M.; El-Monoufi, M.M.A. Moshtohor, Zagazig Univ., Faculty of Agricultural Science. Annals of agricultural science (Moshtohor). 1980. v. 14. p. 47-59. Includes 2 p. ref. (NAL Call No.: S341.A5).

0262

Year-round land application in a cold climate combines reclamation, reuse and disposal (Wastewater).

Olson, J.V. Fuog, R.M. Denver, Colo. : AWWA Research Foundation ; Springfield, Va. : reproduced by NTIS, 1981. Proceedings of the Water Reuse Symposium II : held August 23-28, 1981, Washington, D.C. v.2, p. 1019-1029. ill., maps. (NAL Call No.: TD429.W3 1981).

0263

Yield and quality of groundnut as influenced by irrigation and phosphorus application.

Malik, B.S. New Delhi, The Society. Bulletin - Indian Society of Soil Science. Indian Society of Soil Science. 1979. 1979. (12). p. 414-416. ill. 16 ref. (NAL Call No.: S590.I58).

0264

1972 fertigation of corn on a Hubbard loamy coarse sand in Sherburne County. Fertilizer application .

MacGregor, J.; Fairchild, D.; Munter, R. Minnesota, University, Agricultural Extension Service-U.S., Dept. of Agriculture. Soil Ser Dep Soil Sci Univ Minn. Mar 1973. Vol. 89: pp.

SOIL CULTIVATION

0265

Celery response to type, amount, and method of N (nitrogen)-fertilizer application under drip irrigation (California).

Feigin, A. AGUOA. Letey, J.; Jarrell, W.M. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1982. v. 74 (6). p. 971-977. ill. 16 ref. (NAL Call No.: 4 AM34P).

0266

Effect of fertilization and CCC (chlor-choline-chloride) application on winter wheat grown under irrigation (Growth inhibition to control lodging, Triticum).

Malesevic, M. Jevtic, S. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 187-189. (NAL Call No.: S612.2.W3).

0267

Fertilizer application and irrigation management of broccoli production and fertilizer use efficiency (Brassica oleracea, California).

Letey, J. AGUOA. Jarrell, W.M.; Valoras, N.; Beverly, R. Madison : American Society of Agronomy. Agronomy journal. May/June 1983. v. 75 (3). p. 502-507. ill. Includes references. (NAL Call No.: 4 AM34P).

0268

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. IV. Urea and ammonium sulphate as nitrogen fertilizers (Wheat, Triticum).

Haggag, M. Salam, A.; Amer, S.; El-Kiesh, R.; Abed, A.H. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 325-328. 14 ref. (NAL Call No.: S612.2.W3).

0269

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. V. Effectiveness of banding and broadcasting of fertilizer phosphorus (Triticum).

Amer, S. Salam, A.; Haggag, M.; Khattab, F.; Gallab, R. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979,

November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 329-331. 6 ref. (NAL Call No.: S612.2.W3).

0270

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. III. Yield response to one dose vs. split application of fertilizer nitrogen (Triticum, wheat).

Haggag, M. Salam, A.; Amer, S.; El-Shalwi, M.; Ahmed, E. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 321-324. 12 ref. (NAL Call No.: S612.2.W3).

0271

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. II. Effect on yield of different rates of N and P (nitrogen and phosphorus) applied separately or combined.

Amer, S. Haggag, M.; Salam, A.; El-Bakori, E. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 317-319. 8 ref. (NAL Call No.: S612.2.W3).

0272

Fertilizer application for wheat on light and heavy soils under rainfed and irrigating conditions in Libya. I. Elucidation of application necessity for nitrogen, phosphorus and/or potassium (El Marj red brown clay, Tajoura loamy sand, wheat, Triticum).

Salam, A. Amer, S.; Haggag, M.; El-Shraidi, A. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 313-315. 9 ref. (NAL Call No.: S612.2.W3).

0273

Fungicide and cut spray costs (Application of fungicides while irrigating, USA).

Potter, H.S. Willoughby, Ohio : Meister Publishing Company. American vegetable grower. Apr 1983. v. 31 (4). p. 8-10, 30-31, 33-34. ill. (NAL Call No.: 80 C733).

(SOIL CULTIVATION)

0274

Localized fertigation of no-tillage intensive young olive fields (Spain).

Martin-Aranda, J. Nunez, D.; Moreno, F.; Arrue, J.L.; Roca, M. Osijek (Yugoslavia) : (The Organization?), 1982. Proceedings of the 9th Conference of the International Soil Tillage Research Organization, ISTRD. p. 357-362. Includes references. (NAL Call No.: S604.I52 1982).

0275

Response of cotton to potash application in combination with nitrogen under irrigated condition (India).

Helkiah, J. Muthuswamy, P.; Chandramohan, J.; Ramanathan, K.M.; Krishnamoorthy, K.K. Coimbatore, Tamil Nadu Agricultural University. The Madras agricultural journal. Feb 1981. v. 68 (2). p. 82-85. Includes 5 ref. (NAL Call No.: 22 M262).

0276

Response of tomatoes to N (nitrogen) and water applied via a trickle irrigation system. I. Nitrogen.

Bar-Yosef, B. Sagiv, B. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1982. v. 74 (4). p. 633-637. 5 ref. (NAL Call No.: 4 AM34P).

0277

Response of tomatoes to N (nitrogen) and water applied via a trickle irrigation system. II. Water.

Bar-Yosef, B. Sagiv, B. Madison, Wis., American Society of Agronomy. Agronomy journal. July/Aug 1982. v. 74 (4). p. 637-639. 6 ref. (NAL Call No.: 4 AM34P).

0278

Response of wheat cultivars to irrigation and fertilizer applications (Bangladesh).

Rahman, S.M. Basak, B.C.; Habibullah, A.K.M.; Ahmed, M.; Biswas, M.R. Tokyo : Farm Machinery Industrial Research Corp. AMA, agricultural mechanization in Asia, Africa and Latin America. Autumn 1983. v. 14 (4). p. 55-60. Includes references. (NAL Call No.: S760.A75A35).

0279

Responses of soybean to irrigation and phosphate application in Chambal Command (India).

Singh, U.B. JMAUD. Singh, U.R. Pune : D.R. Bapat. Journal of Maharashtra agricultural universities. May 1983. v. 8 (2). p. 175.

Includes references. (NAL Call No.: S471.I3J6).

0280

Root zone modification: fundamentals and alternatives (To till, fertilize, lime, irrigate, drain, and apply pesticides).

Taylor, H.M. Arkin, G.F. St. Joseph, Mich., American Society of Agricultural Engineers. Modifying the root environment to reduce crop stress. 1981. 1981. p. 3-17. ill. Includes 36 ref. (NAL Call No.: S596.7.M63).

0281

Row crop fertigation (Fertilizer rates, tomatoes, peppers, cucumbers, through irrigation systems, California trials).

Hall, B.J. Willoughby, Ohio : Meister Publishing Company. American vegetable grower and greenhouse grower. Apr 1982. v. 30 (4). p. 71, 73. (NAL Call No.: 80 C733).

0282

Sprinkler-applied and side-dressed nitrogen for irrigated corn grown on sand (Zea mays, fertigation, Georgia).

Gascho, G. AGUOAT. Hook, J.E.; Mitchell, G.A. Madison : American Society of Agronomy. Agronomy journal. Jan/Feb 1984. v. 76 (1). p. 77-81. ill. Includes references. (NAL Call No.: 4 AM34P).

0283

Wheat grain quality as affected by irrigations number and rates and splitting of nitrogen fertilizer (Spacing of fertilizer application, Egypt).

Eweida, M.H.T. Hagra, A.M.; El-Monoufi, M.M.A. Moshtohor, Zagazig Univ., Faculty of Agricultural Science. Annals of agricultural science (Moshtohor). 1980. v. 14. p. 47-59. Includes 2 p. ref. (NAL Call No.: S341.A5).

SOIL EROSION AND RECLAMATION

0284

Nutrient content of tile drainage from cropland in the North Central Region.

Logan, T.J. Randall, G.W.; Timmons, D.R.
Wooster, Ohio, Ohio Agricultural Research and Development Center. Tile drainage is a major practice on the millions of hectares of poorly drained cropland in the North Central Region, and nutrients in tile flow are a significant contribution to the total nutrient export from this area. Several studies at North Central Region institutions have monitored nutrients in tile drainage under varying soil, crop, and climatic conditions. This publication summarizes precipitation, tile flow, and nitrogen and phosphorus losses from tile drainage experiments in Iowa, Minnesota, and Ohio, and is intended for researchers and water quality management planners. Tile flows varied from 0 to 40 cm per year and reflected annual variations in precipitation for the most part, but also differences in soil physical properties and ET. Nitrate-N losses were generally < 30 kg N/ha but increased with nitrogen fertilizer applications in excess of crop needs. Nitrate losses with alfalfa were very low. Phosphorus losses were in non-reactive form. Except where nitrogen in excess of crop requirements is applied, the quality of tile drainage water is usually better than runoff water, especially with respect to phosphorus. North Central regional research publication. Sept 1980. Sept 1980. (268). 16 p. map. 9 ref. (NAL Call No.: S541.N6).

0285

Revegetation tests at a uranium mill site (Includes effect of fertilizer application and irrigation on plant growth).

McDonald, W.R. Shirts, M.B. Socorro, New Mexico Bureau of Mines and Mineral Resources. Proceedings ... Mineral Waste Stabilization Liaison Committee. 1980 (pub. 1981). 1980 (pub. 1981). p. 121-133. ill. (NAL Call No.: TD899.M47M8).

AQUACULTURE RELATED

0286

Some comments on chemical control of *Mimosa pigra* with emphasis on aerial application (Weeds, herbicides, in irrigation systems, reservoirs, rivers, Thailand).

Ratanawaraha, C. Corvallis, Or. : International Plant Protection Center, 1983. *Mimosa pigra* management : proceedings of an international symposium, February 22-26, 1982, Chiang Mai, Thailand / G.L. Robert and D.H. Habeck, co-editors. p. 99-106. ill. (NAL Call No.: SB615.M47M54).

AGRICULTURAL ENGINEERING

0287

Nitrogen balance in a citrus orchard (Shamouti orange, fertilizer and irrigation applications, Israel).

Dasberg, S. Erner, Y.; Bielorai, H. Madison, Wis. : American Society of Agronomy. Journal of environmental quality. July/Sept 1984. v. 13 (3). p. 353-356. Includes references. (NAL Call No.: QH540.J6).

STRUCTURES AND STRUCTURAL EQUIPMENT

0288

Applying nutrients and other chemicals to
trickle-irrigated crops (Plant requirements,
irrigation systems).

Rolston, D.E. Rauschkolb, R.S. Berkeley,
Calif., The Service. Bulletin. California.
University, Berkeley. Cooperative Extension
Service. Aug 1979. Aug 1979. (1893). 14 p. ill.
17 ref. (NAL Call No.: S39.A2C3).

FARM EQUIPMENT

0289

Apply nitrogen through sprinklers: here's a cheap, simple method (Fertilizer application, equipment).
Rennie, G. Wellington, N.Z., G. Deslandes Ltd. New Zealand journal of agriculture. Nov 1981. v. 143 (5). p. 35-36. (NAL Call No.: 23 N48J).

0295

A simple herbigation system Irrigation equipment .
Citrus Veg Mag. Nov 1977. Vol. 41 (3): pp. 22, 41. (NAL Call No.: 80 C498).

0290

Applying liquid fertilizer materials with sprinkler irrigation equipment.
Skinner, R E. University, Cooperative Extension Service. Circ Coop Ext Ser Univ Ga Coll Agric. Sept 1973. Vol. 658, 6 p.: (NAL Call No.: 275.29 G29C).

0291

Fertigation (applying liquid fertilizers through an irrigation system).
Sincerbeau, S.A. Far Hills, N.J., United States Golf Association. USGA Green Section record. May/June 1979. v. 17 (3). p. 10-12. ill. (NAL Call No.: 60.18 UN33).

0292

Fungicide application through sprinkler irrigation systems.
McMaster, G M; Douglas, D R. Trans ASAE (Am Soc Agric Eng). Nov/Dec 1976. Vol. 19 (6): pp. 1041-1044. (NAL Call No.: 290.9 AM32T).

0293

Machinery technology (Tillage, wheel traffic, land leveling by lasers, irrigation, planting, chemical applicators, harvesters).
Twist, B.R. Ames, Iowa : Iowa State University Press, 1984. Future agricultural technology and resource conservation : proceedings, RCA Symposium, Future Agricultural Technology and Resource Conservation, held Dec. 5-9, 1982. Washington, D.C. / edited by B.C. English ... (et al.). p. 450-464. Includes references. (NAL Call No.: S441.R2 1982A).

0294

Mixing in sprinkler irrigation systems for application of fertilizers, soil amendments, and certain pesticides .
Hermann, G J; McMaster, G M; Fitzsimmons, D W. Trans ASAE Gen Ed (Am Soc Agric Eng). Nov/Dec 1974. Vol. 17 (6): pp. 1020-1024, 1028. (NAL Call No.: 290.9 AM32T).

NATURAL RESOURCES

0296

Interim guide for land application of treated
sewage effluent /; prepared by the
Interdepartmental Working Party on Land
Disposal of Treated Sewage Effluents ;
compiled by C. D. Stevenson ; edited by D. A.
Francis and D. J. Zwartz . -.
Stevenson, C D; comp.; Francis, D A.
Wellington, N. Z. : Published by Science
Information Division, DSIR, for the Working
Party :. 1976. Bibliography: p. 33-36. Vol. 36
p.: pp. ill. ; 30 cm. - (NAL Call No.: 464.9
N48 no.114).

WATER RESOURCES AND MANAGEMENT

0297

Ag's \$ billion opportunity: irrigating with wastewater. 2. Fertigation .
Marsh, J H. Irrig Age Hereford. Mar 1975. Vol. 9 (6): pp. 8-9, 11-12. (NAL Call No.: TC801.I7).

0298

Applying herbicides in irrigation systems.
Callihan, R H. Fert Solu. May/June 1975. Vol. 19 (3): pp. 50, 52, 54. (NAL Call No.: 57.8 S04).

0299

Applying phosphorus fertilizer through drip irrigation systems Tomatoes .
Rauschkolb, R S; Rolston, D E; Miller, R J; Carlton, A B; Burau, R G. California, Agricultural Experiment Station. Calif Agric. May 1976. Vol. 30 (5): pp. 8-10. (NAL Call No.: 100 C12CAG).

0300

Environmental planning for wastewater land application: lessons from Penn State's "living filter" (Irrigation, Pennsylvania).
Ferguson, B.K. Amsterdam, Netherlands : Elsevier. Landscape planning. Oct 1983. v. 10 (3). p. 205-218. ill., maps. Includes references. (NAL Call No.: QH75.A1L3).

0301

Evaluation of land application systems : evaluation checklist and supporting commentary / U.S. Environmental Protection Agency.
United States ~ Office of Water Program Operations. Washington U.S. Environmental Protection Agency 1975. At head of title: Technical bulletin. xii, 182 p. ; 27 cm. -. Bibliography: p. 133-148. (NAL Call No.: S657.U52).

0302

"Fertigation" fertilizing through irrigation (in avocado groves).
Affleck, M.E. Vista, Calif., Rancher Publications. Avocado grower. May 1979. v. 3 (5). p. 26-29. ill. (NAL Call No.: SB379.A9A9).

0303

Inorganic constituents of sugarcane juice as influenced by irrigation and fertiliser application.
Srinivasan, T.R. Morachan, Y.B. New Delhi, Indian Sugar Mills Association. Indian sugar. Oct 1978. v. 28 (7). p. 443-439. ill. 12 ref. (NAL Call No.: 65.8 IN26).

0304

Irrigation of wheat in relation to fertilizer application.
Chaudhary, T N; Prihar, S S. Prog Farming. Mar 1975. Vol. 11 (7): pp. 27. (NAL Call No.: S19.P7).

0305

Irrigation system effects on applied fertilizer nitrogen movement in soil (and effect on maize yields).
Onken, A.B. Wendt, C.W. Madison, Wis. Soil Science Society of America journal Soil Science Society of America. Mar/Apr 1979. v. 43 (2). p. 367-372. ill. 17 ref. (NAL Call No.: 56.9 S03).

0306

Sprinkler irrigation of clay soils in southern Finland. IV. The effect of repeated applications of water and nitrogen fertilization on spring cereals. Wheat, barley .
Elonen, P; Kara, O. Suomen Maataloustieteellinen Seura Maataloustieteellinen Aik. 1972. Vol. 44 (3): pp. 149-163. Ref. (NAL Call No.: 20 SU7M).

0307

Studies on the effects of irrigation water and fertilizer on field crops. 1. Interaction between rate of water application and frequency of irrigation and their effect on yield of cotton plant.
el-Sherif, S M; Alsayegh, A Y; Alsamerrai, M. Mesopotam J Agric. 1976. Vol. 11 (1): pp. 55-69. Ref. (NAL Call No.: S19.M4).

0308

Tooling up for fertigation. Fertilizing, irrigating .
Milligan, T. Irrig Age. Nov 1972. Vol. 7 (4): pp. 6-8. (NAL Call No.: TC801.I7).

DRAINAGE AND IRRIGATION

0309

Ammonia losses during sprinkler application of animal wastes.

Pote, J.W. Miner, J.R.; Koelliker, J.K. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1980. v. 23 (5). p. 1202-1206, 1212. ill. 22 ref. (NAL Call No.: 290.9 AM32T).

0310

Anti-pollution devices for applying chemicals through the irrigation system.

Fischbach, P. E. Document available from: University of Nebraska-Lincoln, Dept. of Agricultural Communications, Lincoln, Nebraska 68583 1973. This publication explains how irrigators can utilize anti-pollution devices for applying chemicals through their irrigation system. 1 sheet : ill. (NAL Call No.: Document available from source.). (NAL Call No.: G 73-43).

0311

Application of agricultural chemicals in pressurized irrigation systems (Infection system, operating costs).

Longley, T.S. Sandvol, L.E.; Gray, C.W. Moscow : The Service. Current information series - Cooperative Extension Service, University of Idaho. Jan 1983. Jan 1983. (673). 4 p. ill. (NAL Call No.: 275.29 ID13IDC).

0312

Application of fertilizers through irrigation water.

Hagin, J. Paris : Institut national de la recherche agronomique, (1980?). Les Phenomenes de transport de l'eau et des solutes et l'irrigation : colloque franco-israelien. Avignon, 12-13-14 mai 1980. p. 89-96. 13 ref. (NAL Call No.: S618.P5 1980).

0313

Application of fungicides to peanuts through the irrigation system.

Backman, P.A. Crawford, M.A.; Rochester, E.W. Auburn, The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Summer 1981. v. 28 (2). p. 8. ill. (NAL Call No.: 100 AL1H).

0314

Application of pesticides via drip irrigation systems / by Bruno Yaron ... (et al.).

Yaron, Bruno. Bet Dagan, Israel BARD 1983. Cooperating institution: USDA, ARS ~"April 20, 1983. ~"Final report. ~"Project no. I-95-79.". i, 136 leaves : ill. ; 26 cm. Bibliography: leaves 68-75. (NAL Call No.: S619.T74A66).

0315

Application of the wastewater effluent of a rural community to a mountain meadow (Colorado).

Barbarick, K.A. Sabey, B.R.; Evans, N.A. Washington, D.C., The Federation. Journal - Water Pollution Control Federation. Jan 1982. v. 54 (1). p. 70-76. 29 ref. (NAL Call No.: 293.8 SE8).

0316

Apply anhydrous ammonia in irrigation water.

Mulliner, H. R. Document available from: University of Nebraska-Lincoln, Dept. of Agricultural Communications, Lincoln, Nebraska 68583 1974. This publication describes how anhydrous ammonia can be applied in irrigation water. 1 sheet. (NAL Call No.: Document available from source.). (NAL Call No.: G 74-129).

0317

Applying chemicals through irrigation systems (Fertilizers).

Holman, H.P. Tampa, Fla., Kyle Publishing Co. Citrus and vegetable magazine. Feb 1980. v. 43 (6). p. 22-24, 43-44. ill. (NAL Call No.: 80 C498).

0318

Applying nutrients in irrigation water (Fertilizers, lime, New Zealand).

Syers, K. Auckland : New Zealand Newspapers. The New Zealand farmer. Oct 27, 1983. v. 104 (20). p. 42-43, 45. ill. (NAL Call No.: 23 N484).

0319

Applying slow-release fertilizer in container nurseries with capillary watering.

Havis, J.R. Chicago, Ill., American Nurseryman Publishing Co. American nurseryman. Aug 15, 1982. v. 156 (4). p. 24-26, 28, 30, 32. ill. 5 ref. (NAL Call No.: 80 AM371).

0320

An automated metering system for the experimental application of sprinkler-applied nitrogen fertilizer.

Lauer, D.A.SSSUD. Madison : The Society. Journal - Soil Science Society of America. Mar 1983. v. 47 (2). p. 340-342. ill. Includes references. (NAL Call No.: 56.9 S03).

0321

Behavior of bromacil and napropamide in soils. II. Distribution after application from a point source (Pesticides, irrigation).

Gerstl, Z.SSSUD. Yaron, B. Madison : The Society. Journal - Soil Science Society of America. May/June 1983. v. 47 (3). p. 478-483. ill. Includes references. (NAL Call No.: 56.9 S03).

0322

A center pivot irrigation simulator for pesticide applications.

Pickle, F.J.TAAEA. Chesness, J.L. St. Joseph : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1982. v. 25 (5). p. 1254-1257. ill. 14 ref. (NAL Call No.: 290.9 AM32T).

0323

Changes in available N (nitrogen) for drip-irrigated tomatoes from preplant and fertigation N sources (Fertilization).

Fiskell, J.G.A. Locascio, S.J. (S.I.) : The Society. Proceedings - Soil and Crop Science Society of Florida. 1983. v. 42. p. 180-184. Includes references. (NAL Call No.: 56.9 S032).

0324

Chemigation fascination (Application of fertilizers, herbicides, insecticides, and fungicides through irrigation systems).

Willoughby, Ohio : Meister Publishing Company. American vegetable grower and greenhouse grower. Apr 1982. v. 30 (4). p. 10, 13. (NAL Call No.: 80 C733).

0325

Chemigation: using center pivot and linear move systems (Chemical application through irrigation).

Reese, L.E. Loudon, T.L.; Potter, H.S. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St.

Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2100). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0326

Chemigation via sprinkler irrigation: current status and future development (Chemical application through irrigation).

Threadgill, E.D. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2097). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0327

Control of cercospora leaf spot and rhizoctonia crown rot diseases of sugarbeet with fungicides applied by sprinkler irrigation.

Potter, H.S. Schneider, C.L. Fort Collins, Colo., The Society. Journal of the American Society of Sugar Beet Technologists. Apr 1981. v. 21 (1). p. 50-55. 8 ref. (NAL Call No.: 66.9 AM35J).

0328

Design factors for the rapid infiltration, overland flow, and slow rate irrigation wastewater land application systems.

Culp, G. Hinrichs, D. New York : Academic Press, 1981. Municipal wastewater in agriculture / edited by Frank M. D'Itri, Jorge Aguirre Martinez, Mauricio Athie Lambarri. p. 389-426. ill. Includes references. (NAL Call No.: TD760.I57 1980).

0329

Drip (sprinkler) irrigation of orange trees (on a sandy soil) in humid climate (Fertilizer application).

Myers, J.M. Harrison, D.S. St. Joseph, Mich., American Society of Agricultural Engineers. A Compilation of trickle irrigation papers. 1980. 1980. (78-2018). 13 p. 8 ref. (NAL Call No.: S619.T74C6).

(DRAINAGE AND IRRIGATION)

0330

Droplet size of oil formulated insecticides generated in irrigation water during chemigation.

Groselle, D.E. Stansell, J.R.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2098). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0331

Ecofarming selection of tractor mounted or pull-type sprayers.

Klocke, N. L. Wicks, G. A.; Fenster, C. R. Document available from: University of Nebraska-Lincoln, Dept. of Agricultural Communications, Lincoln, Nebraska 68583 1980. This publication is a guide for the selection of tractor mounted or pull-type sprayers for the application of herbicides in an ecofarming program. 4 p. : ill. (NAL Call No.: Document available from source.). (NAL Call No.: G80-500).

0332

Effect of land levelling (including application of fertilizers/manures) and irrigation on wheat yield.

Khattak, J.K. Larsen, K.E.; Rashid, A.; Khattak, R.A.; Khan, S.U. Tokyo, Farm Machinery Industrial Research Corp. AMA, agricultural mechanization in Asia. Winter 1981. v. 12 (1). p. 11-14, 18. ill. 11 ref. (NAL Call No.: S760.A75A35).

0333

Effect of moisture regimes and level of fertilizer application on yield and water requirement of jute (*Corchorus olitorius* L. and *Corchorus capsularis* L.) (Irrigation, jute varieties, India).

Patel, C.S. Mandal, A.K. Cambridge : Cambridge University Press. The Journal of agricultural science. Oct 1983. v. 101 (pt.2). p. 311-316. Includes references. (NAL Call No.: 10 J822).

0334

Effect of organic matter and gypsum application on the grain yield of wheat irrigated with brackish water (Hissar area).

Singh, H.IJAGA. Sharma, H.C. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 454-456. (NAL

Call No.: 22 IN235).

0335

Effect of trickle irrigation, nitrogen rate, and method of nitrogen application on field-grown Japanese holly (*Ilex crenata*).

Eakes, D.J. Gilliam, C.H.; Ponder, H.G. Auburn, Ala. : The Station. Highlights of agricultural research - Alabama, Agricultural Experiment Station. Summer 1984. v. 31 (2). p. 17. ill. (NAL Call No.: 100 AL1H).

0336

Environmental planning for wastewater land application: lessons from Penn State's "living filter" (Irrigation, Pennsylvania).

Ferguson, B.K. Amsterdam, Netherlands : Elsevier. Landscape planning. Oct 1983. v. 10 (3). p. 205-218. ill., maps. Includes references. (NAL Call No.: QH75.A1L3).

0337

Evaluation of southwestern corn borer control through center-pivot chemigation (Irrigation systems, pest control, Texas High Plains).

Michels, G.J. Chedester, L.D. College Station : The Station. PR - Texas Agricultural Experiment Station. July 1983. July 1983. (4134). 6 p. ill. Includes references. (NAL Call No.: 100 T31P).

0338

Factors to be considered in the application of pesticides via drip irrigation.

Saltzman, S. Gerstl, Z.; Yaron, B. Paris : Institut national de la recherche agronomique, (1980?). Les Phenomenes de transport de l'eau et des solutes et l'irrigation : colloque franco-israelien, Avignon, 12-13-14 mai 1980. p. 71-82. ill. 5 ref. (NAL Call No.: S618.P5 1980).

0339

Fertigation--management and techniques (Fertilizer application by irrigation water).

Manor, S. Paris : Institut national de la recherche agronomique, (1980?). Les Phenomenes de transport de l'eau et des solutes et l'irrigation : colloque franco-israelien, Avignon, 12-13-14 mai 1980. p. 83-87. (NAL Call No.: S618.P5 1980).

0340

Fertigation: a tomato study in New Jersey (Irrigation, fertilization).

Paterson, J. Atlanta, Ga., Potash & Phosphate Institute. Better crops with plant food. Summer 1980. v. 44. p. 3. (NAL Call No.: 6 B46).

0341

Fertigation: role in pecan production (Application of fertilizers through drip irrigation system).

Aitken, J.B. Starkville, Miss. : The Association. Proceedings ... annual convention - Southeastern Pecan Growers Association. 1984. 1984. (77th). p. 121-125. Includes references. (NAL Call No.: 94.69 G29).

0342

Fertigation (the addition of fertilizer and other chemicals to irrigation water) gains increasing acceptance.

Beth, F. Melbourne, John Kennedy Associates. Irrigation farmer. Sept 1981. v. 8 (3). p. 2. (NAL Call No.: SB112.A1I77).

0343

Fertilizer application through a drip irrigation system (Methods).

Gitlin, H. Honolulu : The Institute. Research extension series - Hawaii Institute of Tropical Agriculture and Human Resources. Apr 1982. Apr 1982. (O17). p. 15-17. (NAL Call No.: S481.R4).

0344

Herbigation--the application of herbicides through irrigation systems.

Bendixen, W.E. Sacramento : California Weed Conference Office. Proceedings - California Weed Conference. 1983. Paper presented at the 35th Annual California Weed Conference on "The Challenge to Education as it Affects Agriculture", January 17-20, 1983, San Jose, California. 1983. (35th). p. 88-89. (NAL Call No.: 79.9 C122).

0345

Influences of rainfall and sprinkler irrigation on the residual activity of insecticides applied to corn for control of adult western corn rootworm (Coleoptera:Chrysomelidae) (Diabrotica virgifera virgifera).

Mayo, Z.B. College Park, Md. : Entomological Society of America. Journal of economic entomology. Feb 1984. v. 77 (1). p. 190-193. Includes references. (NAL Call No.: 421 J822).

0346

Insecticide application with sprinkler irrigation systems (Control of the fall armyworm, Spodoptera frugiperda and the corn earworm, Heliothis zea).

Young, J.R. Keisling, T.C.; Stansell, J.R. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Jan/Feb 1981. v. 24 (1). p. 120-123. ill. 12 ref. (NAL Call No.: 290.9 AM32T).

0347

Interactive effects of soil salinity, fertility, and irrigation on field corn (Applied nitrogen fertilizer).

Selassie, T.G. Wagenet, R.J. Berlin, Springer. Irrigation science. 1981. v. 2 (2). p. 67-78. ill. 35 ref. (NAL Call No.: S612.I756).

0348

Irrigation as an integral management tool in pecans (for applying nutrients and pesticides).

Aitken, J.B. Camp, C.R. Starkville : The Association. Proceedings ... annual convention - Southeastern Pecan Growers Association. 1983. 1983. (76th). p. 59-65. ill. Includes references. (NAL Call No.: 94.69 G29).

0349

Irrigation water and N (nitrogen) fertilizer application efficiencies for reduction of water and N losses and for water pollution control.

Paltineanu, J.C. Hera, C.; Paltineanu, R.; Idriceanu, A.; Eliade, G.h.; Suteu, Gh.; Bologa, M.; Canarache, A.; Postolache, T.; Apostol, I. Vienna, International Atomic Energy Agency. Proceedings ... meeting on Soil nitrogen as fertilizer or pollutant. 1978 (pub. 1980). 1978 (pub. 1980). p. 169-193. ill. Includes 13 ref. (NAL Call No.: TD427.F45S65).

0350

Land application and recycling of industrial waste through forages (Spray irrigation, plant nutrients, legumes, grasses).

Turner, D.O. Kaser, W.L. Argonne, Ill., Argonne National Laboratory. Proceedings ... Energy optimization of water and wastewater management for municipal and industrial applications conference. 1979 (pub. 1980). v. 1. p. 429-436. Includes 3 ref. (NAL Call No.: TD653.U5).

(DRAINAGE AND IRRIGATION)

0351

Land application of brewery wastewater (Environment pollution control, source of plant nutrients and irrigation water in turf operation).

Keith, L.W. Madison, Wis., The Association. Technical quarterly - Master Brewers Association of the Americas. Oct/Dec 1981. v. 18 (4). p. 201-204. ill. (NAL Call No.: 390.9 M39T).

0352

Line-source sprinkler systems for experimentation with sprinkler-applied nitrogen fertilizers.

Lauer, D.A.S.S.U.D. Madison : The Society. Journal - Soil Science Society of America. Jan/Feb 1983. v. 47 (1). p. 124-128. ill. 8 ref. (NAL Call No.: 56.9 S03).

0353

Nitrate movement in sandy soil under varying water and fertilizer management (Irrigation and urea application).

Gupta, S.K. Chaudhary, T.N.; Pandey, R.N. East Melbourne, Australia, Commonwealth Scientific and Industrial Research Organization. Australian journal of soil research. 1982. v. 20 (3). p. 225-232. 10 ref. (NAL Call No.: 56.8 AU7).

0354

Nitrogen leaching during sprinkler irrigation of a Dutch clay soil (Fertilizer application to wet soil surfaces, Netherlands).

Dekker, L.W. Bouma, J. Amsterdam : Elsevier Scientific. Agricultural water management. June 1984. v. 9 (1). p. 37-45. ill. Includes references. (NAL Call No.: S494.5.W3A3).

0355

Nitrogen utilization efficiency by drip irrigated celery receiving preplant or water applied N fertilizer (*Apium graveolens*, residual soil nitrogen, *Hordeum vulgare*, California).

Feigin, A.A.G.U.O.A. Letey, J.; Jarrell, W.M. Madison : American Society of Agronomy. Agronomy journal. Nov/Dec 1982. v. 74 (6). p. 978-983. ill. 12 ref. (NAL Call No.: 4 AM34P).

0356

Note on the effect of irrigation water containing boron applied at different growth stages of wheat.

Bharadwaj, V. Tripathi, B.R. New Delhi, Indian Society of Soil Science. Journal of the Indian Society of Soil Science. Dec 1981. v. 29 (4).

p. 570-571. Includes 7 ref. (NAL Call No.: 56.9 IN2).

0357

Nutrient content of tile drainage from cropland in the North Central Region.

Logan, T.J. Randall, G.W.; Timmons, D.R. Wooster, Ohio, Ohio Agricultural Research and Development Center. Tile drainage is a major practice on the millions of hectares of poorly drained cropland in the North Central Region, and nutrients in tile flow are a significant contribution to the total nutrient export from this area. Several studies at North Central Region institutions have monitored nutrients in tile drainage under varying soil, crop, and climatic conditions. This publication summarizes precipitation, tile flow, and nitrogen and phosphorus losses from tile drainage experiments in Iowa, Minnesota, and Ohio, and is intended for researchers and water quality management planners. Tile flows varied from 0 to 40 cm per year and reflected annual variations in precipitation for the most part, but also differences in soil physical properties and ET. Nitrate-N losses were generally < 30 kg N/ha but increased with nitrogen fertilizer applications in excess of crop needs. Nitrate losses with alfalfa were very low. Phosphorus losses were in non-reactive form. Except where nitrogen in excess of crop requirements is applied, the quality of tile drainage water is usually better than runoff water, especially with respect to phosphorus. North Central regional research publication. Sept 1980. Sept 1980. (268). 16 p. map. 9 ref. (NAL Call No.: S541.N6).

0358

Quality pumps the key to effective fungigation (Using irrigation rigs to apply fungicides).

Raleigh, Harvest. The Peanut farmer. May 1980. v. 16 (5). p. 28. (NAL Call No.: SB351.A1P3).

0359

Reponse of spring cowpea to irrigation and phosphorus application.

Ahlawat, I.P.S. Saraf, C.S.; Singh, A. New Delhi, Indian Society of Agronomy. Indian journal of agronomy. June 1979. v. 24 (2). p. 237-239. ill. 7 ref. (NAL Call No.: 22 IN235).

0360

Response of wheat to irrigation schedules in relation to rate and times of nitrogen application (Effects on yields, India).

Koshta, L.D.I.U.A.G.A. Raghu, J.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Sept 1981. v. 26 (3). p. 262-266. 7 ref. (NAL Call No.: 22 IN235).

0361

**Results of citrus fertigation studies
(Fertilizer materials through the irrigation
systems, Florida).**

Koo, R.C.J. s.l., The Society. Proceedings of the ... annual meeting of the Florida State Horticultural Society. 1980 (pub 1981). v. 93. p. 33-36. 8 ref. (NAL Call No.: 81 F66).

0362

**Revegetation tests at a uranium mill site
(Includes effect of fertilizer application and
irrigation on plant growth).**

McDonald, W.R. Shirts, M.B. Socorro, New Mexico Bureau of Mines and Mineral Resources. Proceedings ... Mineral Waste Stabilization Liaison Committee. 1980 (pub. 1981). 1980 (pub. 1981). p. 121-133. ill. (NAL Call No.: TD899.M47M8).

0363

**Saline water applications for leaching and
irrigation (Chemical reclamation, of soils).**

Petrossian, G.P. Gottingen, Fed. Rep. of Germany : Centre International des Engrais Chimiques, (1981). Water and fertilizer use for food production in arid and semiarid zones : 1979, November 26th-December 1st : Garyounis University, Benghazi, Libya : proceedings / edited by E. Welte. p. 107-116. 2 p. ref. (NAL Call No.: S612.2.W3).

0364

**A sprinkler system for research on applying
herbicides in irrigation water.**

Ogg, A.G. Jr. Champaign, Ill., Weed Science Society of America. Weed science. Mar 1980. v. 28 (2). p. 201-203. ill. 13 ref. (NAL Call No.: 79.8 W41).

0365

**Studies on agrotechniques for reducing
irrigation requirement with better utilization
of nutrients by irrigated wheat (Fertilizer
application, grain and straw yields, India).**

Sharma, R.P.IJAGA. Ray, S.; Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 387-392. 4 ref. (NAL Call No.: 22 IN235).

0366

**Studies on the effect of fertilizer doses and
water volumes applied at sowing time on the
yield of wheat grown under dryland conditions
(India).**

Sharma, R.P.IJAGA. Ray, S.B.; Parashar, K.S. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Sept 1981. v. 26 (3). p.

213-219. ill. 4 ref. (NAL Call No.: 22 IN235).

0367

**Studies on the nitrogen and water relations of
wheat. I. Growth and water use in relation to
time and method of nitrogen application (Water
supply).**

Parameswaran, K.V.M. Graham, R.D.; Aspinall, D. Berlin, Springer. Irrigation science. 1981. v. 3 (1). p. 29-44. ill. 21 ref. (NAL Call No.: S612.I756).

0368

**Studies with ¹⁵N (nitrogen isotope) on
fertilization of wheat as affected by source
and time of application at two moisture levels
(Irrigation, India).**

Sinha, M.N.IJAGA. New Delhi : Indian Society of Agronomy. Indian journal of agronomy. Dec 1981. v. 26 (4). p. 413-418. 7 ref. (NAL Call No.: 22 IN235).

0369

**Subsurface drainage water quality from land
application of swine lagoon effluent (Livestock
waste, animal waste as a nutrient source for
crop production).**

Evans, R.O. Westerman, P.W.; Overcash, M.R. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Mar/Apr 1984. v. 27 (2). p. 473-480. ill. Includes references. (NAL Call No.: 290.9 AM32T).

0370

**Update on the land application of wastewater
project at Lubbock, Texas (Sewage effluent
irrigation).**

Gray, J.F. Silver Spring, Md., The Association. Technical conference proceedings - Irrigation Association. 1980. 1980. p. 215-225. (NAL Call No.: 55.9 SP8).

0372

**Use of center pivot simulator for chemigation
research (Chemical application through
irrigation).**

Cochran, D.L. Threadgill, E.D.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2099). 1 microfiche : ill. Includes references. (NAL Call No.:

(DRAINAGE AND IRRIGATION)

FICHE S-72).

Water Reuse Symposium II : held August 23-28, 1981, Washington, D.C. v.2, p. 1019-1029. ill., maps. (NAL Call No.: TD429.W3 1981).

0371

Use of center pivot simulator for chemigation research (Chemical application through irrigation).

Cochran, D.L. Threadgill, E.D.; Young, J.R. St. Joseph, Mich. : The Society. Paper - American Society of Agricultural Engineers (Microfiche collection). 1984. Paper presented at the 1984 Summer Meeting of the American Society of Agricultural Engineers. Available for purchase from: The American Society of Agricultural Engineers, Order Dept., 2950 Niles Road, St. Joseph, Michigan 49085. Telephone the Order Dept. at (616) 429-0300 for information and prices. 1984. (fiche no. 84-2099). 1 microfiche : ill. Includes references. (NAL Call No.: FICHE S-72).

0377

Yield and quality of groundnut as influenced by irrigation and phosphorus application.

Malik, B.S. New Delhi, The Society. Bulletin - Indian Society of Soil Science. Indian Society of Soil Science. 1979. 1979. (12). p. 414-416. ill. 16 ref. (NAL Call No.: S590.I58).

0373

Vegetation changes in a moist grassland under altered water conditions (improved drainage and fertilizer applications).

Smeets, P.J.A.M. Werger, M.J.A.; Tevonderen, H.A.J. Barking, Essex, Eng., Applied Science Publishers. Biological conservation. Aug 1980. v. 18 (2). p. 123-142. maps. 24 ref. (NAL Call No.: S900.B5).

0374

Wastewater irrigation for small communities (Land application).

Reed, S. Crites, R.; Bouzoun, J.; Martel, C.J. New York : American Society of Civil Engineers, c1982. Proceedings of the Specialty Conference on Environmentally Sound Water and Soil Management : Orlando, Fla., July 20-23, 1982 / E.G. Kruse, C.R. Burdick, and Y.A. Yousef, co-editors. p. 501-507. ill. Includes references. (NAL Call No.: TC803.S64 1982).

0375

Why use chemigation (Application of fertilizers, herbicides, insecticides and fungicides through an irrigation system).

Harrison, K.A. Skinner, R.E. Athens, Ga., The Service. Circular - Cooperative Extension Service, University of Georgia. Mar 1981. Mar 1981. (736). 2 p. ill. (NAL Call No.: 275.29 G29C).

0376

Year-round land application in a cold climate combines reclamation, reuse and disposal (Wastewater).

Olson, J.V. Fuog, R.M. Denver, Colo. : AWWA Research Foundation ; Springfield, Va. : reproduced by NTIS, 1981. Proceedings of the

FOOD PROCESSING

0378

A design procedure for land application (of wastewater, in the food-processing industry, recycling nutrients and water through cover crop irrigation and groundwater).
Kroeker, E.J. Lamb, A.; Haskill, J.M.
Springfield, Va., The Service. PB - U. S.
National Technical Information Service. United
States. National Technical Information Service.
Aug 1978. Aug 1978. (289 761). p. 149-172. ill.
5 ref. (NAL Call No.: 157.8 R29).

POLLUTION

0379

Ammonia losses during sprinkler application of animal wastes.

Pote, J.W. Miner, J.R.; Koelliker, J.K. St. Joseph, Mich., The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Sept/Oct 1980. v. 23 (5). p. 1202-1206, 1212. ill. 22 ref. (NAL Call No.: 290.9 AM32T).

0380

Interaction of slaughterhouse effluent protein with three New Zealand soils (Waste disposal, irrigation application, New Zealand).

Russell, J.M. Wellington, New Zealand, Dept. of Scientific and Industrial Research, Science Information Division. New Zealand journal of agricultural research. 1982. v. 25 (1). p. 21-26. Ref. (NAL Call No.: 23 N4892).

0381

Irrigation water and N (nitrogen) fertilizer application efficiencies for reduction of water and N losses and for water pollution control.

Paltineanu, J.C. Hera, C.; Paltineanu, R.; Idriceanu, A.; Eliade, G.H.; Suteu, Gh.; Bologa, M.; Canarache, A.; Postolache, T.; Apostol, I. Vienna, International Atomic Energy Agency. Proceedings ... meeting on Soil nitrogen as fertilizer or pollutant. 1978 (pub. 1980). 1978 (pub. 1980). p. 169-193. ill. Includes 13 ref. (NAL Call No.: TD427.F45S65).

0382

Land application and recycling of industrial waste through forages (Spray irrigation, plant nutrients, legumes, grasses).

Turner, D.O. Kaser, W.L. Argonne, Ill., Argonne National Laboratory. Proceedings ... Energy optimization of water and wastewater management for municipal and industrial applications conference. 1979 (pub. 1980). v. 1. p. 429-436. Includes 3 ref. (NAL Call No.: TD653.U5).

0383

Land application of brewery wastewater (Environment pollution control, source of plant nutrients and irrigation water in turf operation).

Keith, L.W. Madison, Wis., The Association. Technical quarterly - Master Brewers Association of the Americas. Oct/Dec 1981. v. 18 (4). p. 201-204. ill. (NAL Call No.: 390.9 M39T).

0384

Subsurface drainage water quality from land application of swine lagoon effluent (Livestock waste, animal waste as a nutrient source for crop production).

Evans, R.O. Westerman, P.W.; Overcash, M.R. St. Joseph, Mich. : The Society. Transactions of the ASAE - American Society of Agricultural Engineers. Mar/Apr 1984. v. 27 (2). p. 473-480. ill. Includes references. (NAL Call No.: 290.9 AM32T).

0385

Surface application of sewage effluent and sludge (Water pollution, various methods including crop irrigation, forest application).

Sopper, W.E. Madison, Wis., Soil Science Society of America. Agronomy. A series of monographs - American Society of Agronomy. American Society of Agronomy. 1979. 1979. (21). p. 633-663. ill. Includes ref. (NAL Call No.: 4 AM392).

0386

Update on the land application of wastewater project at Lubbock, Texas (Sewage effluent irrigation).

Gray, J.F. Silver Spring, Md., The Association. Technical conference proceedings - Irrigation Association. 1980. 1980. p. 215-225. (NAL Call No.: 55.9 SP8).

0387

Viruses in groundwater beneath sewage irrigated cropland (Land application, coxsackievirus).

Goyal, S.M. Keswick, B.H.; Gerba, C.P. Oxford : Pergamon Press. Water research. 1984. v. 18 (3). p. 299-302. Includes references. (NAL Call No.: TD420.W3).

0388

Year-round land application in a cold climate combines reclamation, reuse and disposal (Wastewater).

Olson, J.V. Fuog, R.M. Denver, Colo. : AWWA Research Foundation ; Springfield, Va. : reproduced by NTIS, 1981. Proceedings of the Water Reuse Symposium II : held August 23-28, 1981, Washington, D.C. v.2, p. 1019-1029. ill., maps. (NAL Call No.: TD429.W3 1981).

TECHNOLOGY

0389

Sprinkler application of anaerobically treated swine wastes as limited by nitrogen concentration / by James Kenneth Koelliker.

Koelliker, James K. 1972. Thesis (Ph.D.)--Iowa State University, 1972. Photocopy of typescript. Ann Arbor: University Microfilms, 1972. iii, 203 leaves ; 21 cm. Bibliography: leaves 94-98. (NAL Call No.: DISS 72-19,989).

0390

**Practices which could reduce production costs
for cotton.**

Cooke Jr, Fred T. Cotton Ginners J
Yearbook/1971:. Mar 1971. AGE. Vol. 14-20: (NAL
Call No.: 304.8 C824).

AUTHOR INDEX

- Abed, A.H. 29, 268, 196
 Abi-Antune, M. 55
 Abou-Khaled, A. 55
 Adams, P.B. 133
 Adams, R.M. 7
 Affleck, M.E. 302, 192
 AGJOA. 15, 58, 267, 18, 64, 355, 12, 52, 265
 AGJOAT. 41, 66, 282
 Ahlawat, I.P.S. 226, 359
 Ahmed, E. 31, 198, 270
 Ahmed, M. 37, 278
 Aitken, J.B. 341, 193, 60, 348, 149
 Albasel, N. 205
 All, J.N. 79
 Alsamerrai, M. 307
 Alsayegh, A.Y. 307
 Amer, S. 30, 197, 269, 29, 196, 268, 31, 198, 270, 32, 271, 199, 272, 200
 Anderson, C.K. 22, 171
 Andreev, N.G. 8
 APOJA. 93
 Apostol, I. 381, 210, 349
 Appleby, A.P. 110
 Apt, W. 86, 151
 Arkin, G.F. 72, 238, 280
 Arnold, W.E. 139, 108, 138, 107
 Arrue, J.L. 16, 274
 Aspinall, D. 367, 249
 Avila Lopez, A. 183
 Backman, P.A. 87, 313
 Bailey, D.L. 94
 Baker, J.M. 201
 Balasundaram, C.S. 179
 Bar-Yosef, B. 231, 277, 230, 276, 224
 Barbarick, K.A. 315, 162
 Barnard, C.J. 104
 Basak, B.C. 37, 278
 Bauder, J.W. 48, 53
 Bendixen, W.E. 120, 344
 Bergeaux, P.J. 165
 Beth, F. 342, 194
 Beverly, R. 58, 15, 267
 Bharadwaj, V. 356, 222
 Bhatnagar, V.K. 154
 Bielora, H. 62, 287, 157, 63, 219
 Biswas, M.R. 37, 278
 Bologa, M. 210, 381, 349
 Bornha, Z. 204
 Bouma, J. 354, 220, 158
 Bouzoun, J. 260, 374
 Bredell, G.S. 104
 Bureau, R.G. 299
 Burt, E.O. 190, 240
 Burt, E.O. 17, 221
 Callihan, R.H. 298
 Camp, C.R. 60, 348, 149
 Canarache, A. 381, 210, 349
 Carlton, A.B. 299
 Chalfant, R.B. 73
 Chandramohan, J. 36, 275, 228
 Chaudhary, T.N. 154, 304
 Chaudhary, T.N. 353, 217
 Chedester, L.D. 78, 337
 Cheema, S.S. 28, 185
 Chesness, J.L. 322, 70
 Cochran, D.L. 153, 371, 258, 372, 257, 152
 Colville, W.L. 255
 Cooke Jr, Fred T. 390
 Crawford, M.A. 87, 313
 Crites, R. 374, 260
 Cudney, D.W. 128
 Culp, G. 328, 172
 Dasberg, S. 62, 287, 157, 63, 219
 Davidson, J.M. 17, 221
 De Datta, S.K. 10
 De, R. 223
 Dekker, L.W. 158, 220, 354
 Deshmukh, R.B. 21
 Douglas, D.R. 292
 Dowler, C.C. 106, 145, 111, 156
 Dumbre, A.D. 21
 Dwivedi, S.S.L. 177
 Eakes, D.J. 13, 184, 335
 Easton, G.D. 94
 El-Bakori, E. 32, 199, 271
 el-Gibaly, M.H. 244
 El-Kiesh, R. 29, 196, 268
 El-Monoufi, M.M.A. 68, 261, 283
 El-Shalwi, M. 31, 270, 198
 el-Sherif, S.M. 307
 El-Shraidi, A. 200, 272
 Eliade, G.H. 210, 381, 349
 Elonen, P. 306
 Epperson, J.E. 5, 76
 Erner, J. 63, 219
 Erner, Y. 62, 157, 287
 Evans, L.T. 10
 Evans, N.A. 162, 315
 Evans, R.O. 369, 251, 384
 Eweida, M.H.T. 68, 283, 261
 Fairchild, D. 264
 Farris, P.J. 7
 Feigin, A. 64, 18, 355, 52, 12, 265
 Fenster, C.R. 331
 Ferguson, B.K. 186, 336, 300
 Ferguson, J.A. 114
 Ferguson, R.D. 203
 Fetzer, L.E. 111, 145, 156
 Fischbach, P.E. 124, 239
 Fischbach, P.E. 310
 Fiskell, J.G.A. 323, 61, 218
 Fitzsimmons, D.W. 294
 Flinn, J.C. 4, 54
 FNETD. 92
 Forster, R.L. 91, 92, 101, 98
 Franc, G.D. 93
 Francis, D.A. 296
 Fuog, R.M. 262, 388, 376
 Gallab, R. 30, 197, 269
 Gallaher, R.N. 79
 GARRA. 145, 111, 156
 Gascho, G. 66, 41, 282
 Gerba, C.P. 387, 259, 159
 Gerstl, Z. 147, 321, 155, 137, 71, 338
 Ghoneim, M.F. 244
 Gilat, R. 246
 Gilliam, C.H. 13, 335, 184
 Gitlin, H. 343, 202

AUTHOR INDEX

- Glaze, N.C. 69
Goyal, S.M. 259, 159, 387
Graham, R.D. 249, 367
Gray, C.W. 311
Gray, J.F. 256, 370, 386
Groselle, D.E. 330, 144
Gupta, S.K. 217, 353
Habibullah, A.K.M. 37, 278
Haggag, M. 30, 269, 197, 29, 268, 196, 31, 270, 198, 32, 271, 199, 272, 200
Hagin, J. 312, 161
Hagood, M. A. 132
Hagras, A.M. 68, 283, 261
Hairston, J.E. 255
Halemani, H.L. 229
Hall, B.J. 281, 237
Hapase, D.G. 75
Harrison, D.S. 329
Harrison, K.A. 135, 375
Harrison, M.D. 93
Haskill, J.M. 173, 378
Hassanin, H. G. 244
Havis, J.R. 168, 319
Hegde, D.M. 229
Heid Jr, Walter G. 1
Heikes, E. 122
Heinrichs, E.A. 83
Helkiah, J. 36, 275, 228
Hera, C. 349, 381, 210
Hergert, G. W. 243
Hermann, G. J. 294
Hertzog, P.U. 48, 53
Hill, J. E. 128
Hinrichs, D. 328, 172
Holman, H.P. 317, 164
Hooda, R.S. 65, 227
Hook, J.E. 41, 66, 282
Hoover, H. 6
Howell, J. V. 201
Hylin, J.W. 86, 151
Hylin, V. 86, 151
Idriceanu, A. 349, 381, 210
IJAGA. 67, 43, 247, 27, 334, 182, 45, 250, 368, 42, 245, 365, 38, 232, 360, 44, 248, 366
Jarrell, W.M. 15, 58, 267, 18, 64, 355, 12, 52, 265
Jevtic, S. 24, 178, 266
JMAUD. 21, 39, 279, 233
Johnson, A.W. 69
Johnston, S.A. 133
Kafkafi, U. 246
Kaiser, K. 4, 54
Kalra, G.S. 65, 227
Kara, O. 306
Kaser, W.L. 212, 382, 350
Keisling, T.C. 81, 346
Keith, L.W. 383, 213, 351
Keswick, B.H. 387, 159, 259
Khan, S.U. 25, 332, 180
Khattab, F. 30, 269, 197
Khattak, J.K. 25, 180, 332
Khattak, R.A. 25, 332, 180
Kishli, A. L. 55
Klocke, N. L. 331
Kobozev, I. V. 8
Koelliker, J.K. 379, 309, 160
Koelliker, James K. 242, 389
Koo, R.C.J. 11, 234, 361
Koren, E. 112
Koshta, L.D. 38, 360, 232
Krishnamoorthy, K.K. 36, 228, 275
Kroeker, E.J. 378, 173
Kudasomannavar, B.T. 229
Kundra, H. 28, 185
Lacey, J.R. 48, 53
Lamb, A. 173, 378
Larsen, K.E. 25, 332, 180
Larson, Donald K. 1
Lauer, D.A. 320, 215, 352
Lee, T. A Jr. 88
Letey, J. 15, 58, 267, 64, 18, 355, 12, 52, 265
Locascio, S.J. 323, 61, 218
Logan, T.J. 357, 284
Longley, T.S. 311
Loudon, T.L. 170, 325, 142
MacGregor, J. 264
Maki, J.E. 48, 53
Malesevic, M. 24, 178, 266
Malik, B.S. 47, 377, 263
Mamaril, C.P. 4, 54
Mandal, A.K. 26, 181, 333
Manickam, T. S. 175
Manji, B. T. 96
Manor, S. 187, 339
Marsh, A. W. 211
Marsh, J. H. 297
Martel, C.J. 374, 260
Martin-Aranda, J. 16, 274
Martin, A.R. 109, 125
Mayo, Z.B. 80, 345, 148
McAuliffe, D. 110
McDonald, W.R. 362, 235, 285
McMaster, G. M. 292, 294
Menkhaus, D.J. 7
Mermoud, D.E. 114
Michels, G.J. 78, 337
Miller, R. J. 299
Miller, V. 118
Milligan, T. 308
Miner, J.R. 379, 160, 309
Mishra, B.N. 50, 34, 225
Mitchell, G.A. 66, 41, 282
Miyaguchi, T. 188
Moholkar, P.R. 75
Moomaw, R.S. 109, 125
Morachan, Y.B. 206, 102, 303
Moreno, F. 16, 274
Mulliner, H. R. 129
Mulliner, H. R. 316
Munter, R. 264
Murphy, L.S. 22, 171
Musser, W.N. Tew, B.V. 5, 76
Muthuswamy, P. 36, 228, 275
Myers, J.M. 61, 218, 329
Nagle, M. E. 94
Narayanan, K. 74
Nnodu, E.C. 93
Noy, Y. 246
Nunez, D. 16, 274
OASPA. 14, 113, 100, 115
Ocampo, G. 183
Ogawa, J. M. 96
Ogg, A. G Jr. 103
Ogg, A. 105
Ogg, A.G. Jr. 364, 130
Olson, J.V. 388, 262, 376
Onken, A.B. 9, 209, 305
Oren, Y. 89
Oscar, R. 6
Overcash, M.R. 369, 251, 384
Overman, A.J. 85
Paltineanu, J.C. 210, 381, 349
Paltineanu, R. 210, 381, 349
Pandey, R. G. 177
Pandey, R.N. 353, 217
Panwar, K.S. 19, 35

AUTHOR INDEX

- Parameswaran, K.V.M. 249, 367
 Parashar, K.S. 67, 43, 247, 42, 245, 365, 44, 366, 248
 Paschal, J. L. 33, 216
 Patel, C.S. 26, 181, 333
 Paterson, J. 56, 340
 Patil, A.S. 75
 Petrossian, G.P. 238, 363
 Phatak, S.C. 69
 Pickle, F.J. 322, 70
 Pillai, K.G. 223
 PLSOA2. 63, 219
 PNWSB. 133
 Ponder, H.G. 13, 184, 335
 Postolache, T. 381, 210, 349
 Pote, J.W. 379, 160, 309
 Potter, H.S. 142, 170, 325, 146, 273, 90, 327
 Price, J.F. 85
 Prihar, S. S. 304
 Qualls, M. 117
 Raghu, J.S. 38, 232, 360
 Rahman, S.M. 37, 278
 Raj, D. 176
 Ramakrishnan, C. 74
 Ramanathan, K.M. 36, 228, 275
 Ramaswami, P.P. 176
 Ramkumar, R.K. 179
 Randall, G.W. 284, 357
 Rashid, A. 25, 332, 180
 Ratanawaraha, C. 286, 127
 Raun, E.S. 82
 Rauschkolb, R. S. 299
 Rauschkolb, R.S. 51, 288, 166
 Ray, S. 42, 245, 365
 Ray, S.B. 44, 248, 366
 Razee, D. 119
 Reed, S. 374, 260
 Reese, L.E. 325, 170, 142
 Rennie, G. 289, 163
 Reuss, J. O. 243
 Reynolds, J.H. 214
 Richards, A.W. 46, 253
 Roberts, S. 46, 253
 Robinson, J.F. 84, 40
 Roca, M. 16, 274
 Rochester, E.W. 87, 313
 Rohde, W.A. 156, 111, 145
 Rolston, D. E. 299
 Rolston, D.E. 51, 166, 288
 Russell, J.M. 380, 207
 Sabey, B.R. 315, 162
 Sadler, A.J. 93
 Sagiv, B. 277, 231, 276, 230
 Salam, A. 30, 197, 269, 29, 268, 196, 31, 198, 270, 32, 271, 199, 272, 200
 Saltzman, S. 71, 338
 Samson, R.G. 91
 Sandler, D. 95, 150
 Sandvol, L.E. 311
 Saraf, C.S. 226, 359
 Schepers, J.S. 255
 Schneider, C.L. 90, 327
 Schreder, W. R. 96
 Scott, D.E. Sr. 156, 145, 111
 Segars, W.L. 57
 Seiber, J.N. 83
 Selassie, T.G. 208, 347
 Selvaraj, K.V. 176
 Shammis, A. T. 55
 Sharma, H.C. 27, 334, 182
 Sharma, R.P. 43, 67, 247, 42, 365, 245, 44, 366, 248
 Shearer, M. N. 131
 Shestakova, N. A. 59
 Shirts, M.B. 285, 235, 362
 Shlevin, E. 112
 Siefert, W. 134
 Sincerbeau, S.A. 191, 291
 Singh, A. 359, 226
 Singh, H. 27, 334, 182
 Singh, J.P. 19, 35
 Singh, K.N. 50, 34, 225
 Singh, U. B. 20
 Singh, U.B. 39, 279, 233
 Singh, U.R. 39, 279, 233
 Sinha, M.N. 45, 250, 368
 Sinha, R. 177
 Sithanantham, S. 74
 Skinner, R. E. 290
 Skinner, R.E. 375, 135
 Sklany, T.E. 156, 145, 111
 Smeets, P.J.A.M. 49, 373
 Smith, C.M. 84, 40
 Smith, R. 23
 Smittle, D. 69
 Snyder, G. H. 190, 240
 Snyder, G.H. 17, 221
 Solel, Z. 95, 150, 89
 Sopper, W.E. 3, 385, 254
 Srinivasan, T.R. 102, 206, 303
 SSSJD. 155, 321, 137, 320, 215, 352
 Stadnik, G.I. 241
 Stansell, J.R. 144, 330, 81, 346
 Stevenson, C. D; comp. 296
 Stone, L.R. 22, 171
 Stranger, C.E. 14, 113, 100, 115
 Sumner, D.R. 69
 Suteu, Gh. 210, 381, 349
 Syers, K. 167, 318
 TAAEA. 322
 Talbert, R.E. 114
 Taylor, H.M. 72, 236, 280
 Teasdale, J.R. 133
 Tevonderen, H.A.J. 49, 373
 Threadgill, E.D. 153, 258, 371, 152, 257, 372, 143, 326, 141
 Timmons, D.R. 284, 357
 Tiwari, C. B. 77
 Tomar, S. P. 20
 Trahan, G.B. 84, 40
 Tripathi, B.R. 356, 222
 Turner, D.O. 350, 212, 382
 Turner, W. E. 116
 Twist, B.R. 293
 Uchtmann, D. L. 2
 Valoras, N. 15, 58, 267
 Velasco, L.E. 4, 54
 Velayutham, B. 74
 Velu, V. 179
 Venkataramanan, C. R. 175
 Verma, A. N. 77
 Verma, N. D. 77
 Vincent, A. P. 104
 Wagenet, R.J. 208, 347
 Walla, A.S. 28, 185
 Watson, S. 99
 Weaver, W.H. 46, 253
 WEESA. 125
 Wendt, C.W. 9, 305, 209
 Werger, M.J.A. 49, 373
 Westerman, P.W. 384, 369, 251
 Wicks, G. A. 331
 Wiese, A. F. 116
 Williams, B. C. 252
 Wilson, R.G. Jr. 125
 Worker, G. F. Jr. 128

AUTHOR INDEX

Workman, Milton. 174
Wrage, Leon J. 108, 139, 107, 138
Yamaguchi, A. 189
Yaron, B. 147, 321, 155, 137, 71, 338
Yaron, Bruno. 136, 314
Yoles, D. 246
Young, J.R. 371, 258, 153, 330, 144, 372, 152,
257, 73, 81, 346

CORPORATE AUTHOR INDEX

Asian and Pacific Council.,
Food and Fertilizer
Technology Center. 195
California, Agricultural
Experiment Station. 128,
299
Illinois, University,
Cooperative Extension
Service. 2
Minnesota, University,
Agricultural Extension
Service U.S., Dept. of
Agriculture. 264
U.S., Agricultural Research
Service, Crops Research
Division. 94, 96
United States Office of
Water Program Operations.
301
University, Cooperative
Extension Service. 290

